
SmarteLearner

SEA Practice Test

New SEA Specifications 2025 - 2028

Volume III

Solution Manual

Fully worked mathematics solutions.

Answers to all E.L.A questions, in full sentences where applicable.

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ELA Test 1

1. hikeing - hiking	7. begin!	13. has – have
2. speceis - species	8. Amazon Raiders ”,	14. itself – themselves
3. indiginous - indigenous	9. Immediatly,	15. are – is
4. treats - threats	10. contents:	17. help – helps
5. polution – pollution	11. All	18. by – with
6. effected - affected	12. mother’s	19. quick - quickly

<p>19. Three rivers mentioned in the passage are: (Name any TWO)</p> <p>1: Nile River 2: Amazon River 3: Yangtze River</p>
<p>20. According to the passage, two things that humans can use rivers for are:</p> <p>Use 1: drinking water Use 2: irrigation in agriculture Use 3: transportation Use 4: to produce energy Use 5: leisure activities</p>
<p>21. The word ‘generation’ as used means production.</p>
<p>22. Purpose – to compare the longest rivers in the world and their importance to humans. Details – The longest rivers in the world in order of length are : the Nile. The Amazon and the Yangtze. Rivers act as a source of food and can generate electricity</p>
<p>23. If rivers did not exist, human beings would:</p> <ul style="list-style-type: none"> ● lack sufficient drinking water ● lack water to water their crops and feed their animals, thereby leading to insufficient food supply ● lack transportation to certain areas that were only accessible by rivers ● be unable to produce energy from rivers ● be unable to participate in any leisure activities that require rivers
<p>24. River – Amazon Evidence – The Amazon River is by far the largest river in the world, by discharge- volume.</p>
<p>25. I agree that rivers are an essential part of human life because they are involved in many daily activities that are important to our survival and without them, life would be very difficult.</p>
<p>26. Two different performers that will be at the circus are:</p> <ul style="list-style-type: none"> ● acrobats ● trapeze acts ● unicyclists ● magician ● clown ● tightrope walkers ● dancers ● hoopers
<p>27. One literary device used in the poem is:</p> <ul style="list-style-type: none"> ● repetition- “I can’t wait”, “And everyone is excited”, ““The circus is in town.” ● onomatopoeia- “oohs and ahs”
<p>28. Feeling – excited, full of anticipation Evidence- I can’t wait to attend the show, It’s been too long</p>
<p>29. This line means that the performances are breathtaking/ amusing and can be so risky that they also make the audience anxious.</p>
<p>30. Another word/ phrase that could have been used instead of “grand” in line 3 of the poem is:</p>

<ul style="list-style-type: none"> ● magnificent ● superb ● spectacular ● splendid ● striking
31. Yes, I do think that the circus is appropriate for all ages because there is an item/ act/ event/ performance that everyone will enjoy. Additionally, throughout the poem, the speaker says, “everyone is excited.”
32. I think the circus only comes once a year so the people will not get used to the performances and will therefore look forward to it and support/attend it. Additionally, the circus can visit other areas during this time. It can also give the performers more time to practise and improve their acts.
33. The puppy was last seen on 25th December 2020 in the Gulf View Area.
34. An image of the lost puppy is placed on the flyer so that searchers will be able to identify the puppy if they see him.
35. Techniques – Bold heading, use of picture/illustration, bold font for important information such as reward
36. I think the most important piece of information on the flyer is where the puppy was last seen as this gives people an idea of where to look and increases the likelihood of finding Biscuit.

ELA Test 2

1. maintainence – maintenance	7. Do I like cheese ?	13. we played – were playing
2. Idealy – Ideally	8. No,	14. soak – soaked
3. sufficiant – sufficient	9. varieties :	15. although – since
4. tilage – tillage	10. “Field	16. with – from
5. waterloged – waterlogged	11. Cheese”,	17. who – whom
6. avialability – availability	12. doesn’t	18. more – most

19. According to the passage, the art exhibition is being held in a classroom at the West Ibis High School.
20. The speaker in the passage went to her grandparents’ cottage to get her inspiration for the painting.
21. I think the competition was anonymous so that the results would be fair and unbiased and based solely on the artwork and not the artists themselves.
22. Quality – regret , apologetic Line – I am truly sorry for last night
23. The moment of truth that the writer is referring to in line 18 of the passage is the time when the winner of the competition will be announced.
24. View – respectful Reason – she didn’t respond with anger when discovered in the classroom. View – dedicated, diligent Reason – for weeks she worked tirelessly on her piece
25. Lesson: I learnt that you should always take into consideration everyone’s perspective/ point of view. Explanation: By doing so, unnecessary arguments and incidents, like the one in the passage can be prevented as the situation could have been clarified before it escalated.
26. Profession – barber, hairdresser Evidence – Line5, Lines 13-14, Lines 17-18
27. I think that the other person in the poem is Client Number One because of the time of day (morning) and also because the first line of the poem states, “The first young man walked in.”
28. Two things that the main speaker did at work, on Client Number One are: <ul style="list-style-type: none"> ● draped him

<ul style="list-style-type: none"> brushed/ combed his hair cut his hair washed his hair
29. The mood of the main speaker in the first stanza of the poem is one of excitement, eagerness, keenness, enthusiasm, zest, etc.
30. I think the word elite, as used in the poem, means handsome, noble, like royalty, first class, etc.
31. I do think that the main speaker in the poem enjoys his/ her job because of the level of enthusiasm portrayed during it. He/ She seems to really/ thoroughly enjoy what they do.
32. Yes, she would. Reason – the last client was pleased with the haircut so he/she may recommend the barber to others
33. The flyer is intended to educate persons about the characteristics of three types of plants: palm leaves, hibiscus flower and sunflower, and some of their respective uses.
34. Two uses of the sunflower are: <ul style="list-style-type: none"> It provides food. It is used as decoration. It can be used as herbal medication.
35. I think a picture of each plant was included on the flyer to make it easier to identify and know exactly which plant is being referred to.
36. I think two additional detail that should be included on the flyer is details about how to care for each type of plant and the expected lifespan of each plant/

ELA Test 3

1. extraordinary – extraordinary	7. its – it’s	13. raised - rose
2. intelligant – intelligent	8. cheesecake,	14. jump - jumped
3. agressive – aggressive	9. Many	15. were – was
4. foriegn – foreign	10. preparation:	16. of – off
5. painfull – painful	11. temperature.	17. group – troop
6. itchy – itchy	12. ask?	18. nimble – nimbly

19. According to the passage, Wilbur and Orville Wright, the Wright brothers, conducted the first flight.
20. The meaning of the following words as used in the passage are: tedious- extremely long and tiring, trying feasible- possible and easy to accomplish without many issues/ benefits outweigh the disadvantages
21. I would say that aeroplanes are diverse machines because they can be used to perform multiple tasks in a variety of areas. A line from the passage to support my answer is, “These machines are used in the military, to transport passengers and goods, as well as for recreational purposes.” (lines 14-15)
22. Two things that the inventors discussed to be used as a source of power for aeroplanes were: <ul style="list-style-type: none"> clockwork mechanisms spring-powered systems electricity gasoline propellers
23. Quality – determined , diligent, creative Evidence - many hours of tedious trials and toil went into designing the machine. After much deliberation, they overcame the problem.
24. Reason – the writer wants to appreciate the challenges the Wright Brothers faced and how determined they were to overcome them. We might not be able to fly in planes or transport items without their work

25. Purpose – the provide a brief history of aero planes, their inventors and how important aeroplanes are today Details - The first flight was made by the Wright Brothers who they encountered challenges. Aero planes have come a long way and are used in the military, to transport passengers and goods, as well as for recreational purposes.
26. In the poem, it is early in the morning. A line from the poem to support my answer is line 2, “Just before the sun.”
27. The speaker in the poem was reluctant to train because he was demotivated due to an injury that he had suffered.
28. Reason – due to injury Line - And since your last injury, You maybe feel a bit down.
29. Mood – reluctant, dreadful, worried Line - I dreaded all night long., Absolutely reluctant,To begin my training.
30. View – angry, threatening, strict Reason – the speaker says that the coach blew his whistle harshly and he perhaps wanted to punish him later. This shows that the coach looked angry/ strict
31. In the second stanza of the poem, the speaker’s views of his coach changed as he now views him as compassionate and understanding, and even as encouraging.
32. Message – never give up despite challenges in life Explanation – the speaker felt that due to the injury and how others would react, he would fail but if you look for help, enjoy the experience, focus on improving yourself and overcoming challenges you would succeed.
33. In Chapter 3 and Chapter 5 the reader can get information on cultivating Hibiscus flowers.
34. Chapter – 5 Reason – this chapter deals with growing flowers at home
35. Chapter - 4 Reason – Pests are considered insects and this chapter may show pictures of those insects
36. No Reason – the chapters in the book are about flowers like the Hibiscus. A vegetable farmer will need information on growing and harvesting.

ELA Test 4

1. lightening – lightning	7. weeks,	13. could - can
2. travells – travels	8. schedule:	14. It- they
3. eletrical – electrical	9. wasn’t	15. Amazing – Amazingly
4. thorough – through	10. Association	16. strong – stronger
5. genarates- generates	11. off?	17. and – but
6. defening – deafening	12. has!	18. love – loves

19. The event taking place in the passage is the eruption of a volcano.
20. The meaning of the following words, as used in the passage are: - blazing- extremely hot/ unbearably hot - etched- permanently carved into someone’s memory so that they will never forget it
21. Simile - heart raced as fast as a cheetah Personification - whistling wind, Gran Bestia was grumbling, Gran Bestia’s shouts became even louder
22. I think the smoke signal was sent from the top of a cliff so that it would be better seen from a high point and would therefore be more effective.
23. Feeling – fear, anxiety

Reason – she realized that the volcano would soon erupt causing the villagers to die. She was just a small girl and thought she would not be able to save the village.
24. Quality – Brave, Creative, Concerned, Selfless
25. I do believe that the speaker deserves the title because of the efforts that she put in and how she was able to save the population from death and destruction.
26. The mango tree was planted by the speaker’s grandma.
27. 1- simile, 2 - personification
28. I think this line means that the tree is something that will remain on earth even when the grandma passes on, and it will represent what she has done.
29. Grandeur – greatness, magnificence. Endurance – determined, survival, strength, not giving in
30. Quality – kindness, love Reason – she shares stories with her grandchildren to prepare them for life Quality – endurance Reason – she may have had a challenging life and now has grown old and never gave up
31. I think the grandmother enjoys telling the story of the mango tree because it is a great accomplishment and it tells a major part, if not the entirety of the story of her life, from a child when she planted it to beyond her life on earth.
32. The message being conveyed in the poem is that great things can come from small things, such as the tree from the seed, if one endures and once it is cared for properly and given the required love and kindness.
33. The flyer is an invitation to a masquerade ball.
34. Reasons – free giveaways, interested in new candles, excited about participating in a masquerade ball.
35. This was done to attract the attention of those who may be near the invitation and lure them to read it.
36. I think the most important piece of information provided on the flyer is that the invitation is required to enter the ball. This is vital as is someone decides to attend and they do not have the invitation with them, then they will not be able to attend.

ELA Test 5

1. curiosity – curiosity	7. project.	1. throw – threw
2. bizarre- bizarre	8. materials:	2. less- fewer
3. suprised – surprised	9. She,	3. but - so
4. vaccum- vacuum	10. “The	4. reducing – reduction
5. furyous – furious	11. teacher’s	5. are – is
6. knowlege – knowledge	12. she?	6. minimize – minimizes

19. Location – Himalayas First climb – May 1953
20. According to the passage, the “Death Zone” is an area where there is extremely thin air and thus it is very difficult to breath , making it hard on the human body. Many die here.
21. The word ‘ultimate’ as used in line 30 refers to the final or most important objective that one aims to achieve.
22. Reason 1 – harsh cold climate Reason 2 – lack of food for animals and poor soil for plant growth
23. According to the passage, the tallest mountain in the world is actually Mauna Kea, in Hawaii.
24. I think the word “ultimate” is used so that the reader can clearly understand that this is the goal of the highest standard and that there is nothing “better” or “above” this.
25. Yes, climbing Mt. Everest would be a great achievement since many others have failed.

No, climbing Mt. Everest is not encouraging due to its dangerous climate and height that has caused the death of many.
26. One literary device used in the poem is: Simile - “like the sting of a thousand bees”- line 1 - “like the beat of a thousand drums”- line 6 Metaphor - “river of tears” -line 2
27. In the poem, the event that is occurring is a funeral.
28. Sight – dressed in white Sound – pounded like the beat of a thousand drums
29. The use of the word “halt” in the poem means that the grandmother is no longer suffering/ her suffering due to her ailment has now stopped.
30. Mood – grief, sadness Reason – the poet is crying for his / her grandmother who passed away
31. View – admiration , Saw her as a beautiful angelic person, she stared in awe at the beautiful woman before me, heaven gained an angel, earth lost.
32. Another title that would have been suitable for the poem is: • Farewell Grandma • Goodbye Granny/ Gram/ Grandma • So long Gram • Grandma is an Angel • Any suitable title
33. The flyer is an invitation to a masquerade ball.
34. Symptoms – so that the reader can determine if he/ she is infected and seek medical attention. Prevention – so that persons can avoid infection and transmission of the virus to others.
35. This was done to attract the attention of those who may be near the invitation and lure them to read it.
36. I think the most important piece of information provided on the flyer is that the invitation is required to enter the ball. This is vital as is someone decides to attend and they do not have the invitation with them, then they will not be able to attend.

ELA Test 6

1. irresistable – irresistible	7. communicating:	13. insect – insects
2. happned – happened	8. messaging,	14. is – are
3. extraordinary - extraordinary	9. this?	15. take – takes
4. disapaired – disappeared	10. distances.	16. laying – lay
5. embarassed – embarrassed	11. Back	17. are – is
6. baloons – balloons	12. its – it’s	18. new – newly

19. The speaker in the passage is upset because he/she did not get accepted to the programme at a university that they really wanted to attend.
20. Simile – a heart as heavy as lead Personification – skies entered, gradually and gracefully, sea breeze at night managed to paint a smile, veins burned with rage and disappointment.
21. The events in the passage are taking place at night.
22. This line means that the speaker’s mind was so full of different thoughts that he/she possibly felt as though it was going to explode.
23. Tranquility – peace, serenity, calm

Overpowered – took over, controlled, consumed
24. Feelings at beginning were a mixture of anger and hurt but at the end it changed to hope and peacefulness as better things were yet to come
25. Yes. The title shows how the sea, its movements, waves and its vast waters were able to bring calmness to the narrator. It possibly showed him how life is also in constant movement and calm comes after each trouble.
26. Two things that Selly enjoy doing are: <ul style="list-style-type: none"> ● exploring the sea/ reefs ● making new friends
27. Personifications are mainly used in the poem.
28. Possibilities – risks, options, chances Encounters – meets, come upon, bumped into
29. I would say that Selly enjoys making new friends. A line from the poem to support my answer is: “And uncover friends of different species”- line 7 “Selly is also really rather eager, To interact with every aquatic creature.” - lines 9-10
30. The mood of stanza 3 is energetic/ adventurous/ friendly/ amiable.
31. Lines – she explores the sea wrecks and all, she longs to explore each and every reef, she awaits her next big discovery
32. Teacher’s Discretion
33. This weather forecast will be useful between Saturday 21st to Wednesday 25th February.
34. Hanna and her family should go on Wednesday 25th February as this is the only day on the forecast where little to no rainfall is expected.
35. Yes – the illustrations can give you at a glance what the weather would be like for the given days. No – the images are too small and do not cover the entire week
36. Tuesday has the highest chance of precipitation 40%.

ELA Test 7

1. neighbor – neighbour	7. mammals:	13. took – takes
2. incredible – incredible	8. fur?	14. arrives – arrive
3. dialy – daily	9. It’s	15. also – although
4. asist – assist	10. “Mammals	16. on – along
5. instal – install	11. habitats.”	17. that – who
6. flamable – flammable	12. oceans,	18. she - her

19. According to the passage, the name of the virus that causes chickenpox is the varicella-zoster virus.
20. From the passage, two symptoms of chickenpox are: <ul style="list-style-type: none"> ● fever ● headaches ● tiredness ● loss of appetite ● nausea ● rash
21. Two things that an infected person can do to avoid spreading the disease are: <ul style="list-style-type: none"> ● avoiding overall contact with others ● covering their coughs and sneezes ● washing their hands often ● covering their rash and blisters
22. The main idea of paragraph 3 is that chicken pox can infect all groups of people, however, some are affected more than others, especially males and pregnant females.

23. Yes, especially as it results in an average of four thousand, two hundred deaths per year.
24. Yes. The number of cases of chickenpox disease has decreased drastically. There have almost been ninety-percent fewer cases in the United States of America.
25. The purpose is to provide factual information on Chicken Pox such as its symptoms, how it is spread and the importance of vaccination.
26. The reader could have gone swimming at the bay.
27. 1. gone swimming at the bay 2. planned a meal for today
28. Possibilities: This refers to potential options or opportunities that may arise. Destinies: This refers to the predetermined course of events or outcomes in someone's life.
29. Mood – reflective, unsure, nostalgic Reason – the speaker thinks about all the things he/she could have done differently if he/ she got another chance at life. Remembers all the things that he enjoyed such as swimming, eating good meals
30. I think the writer wrote this poem to get the reader thinking about the many things that he/she could do differently if they got a chance to experience the same day, all over again.
31. The line is repeated for emphasis. The poet wants the reader to focus on the idea that if someone can go back in time they might make different choices.
32. Teacher’s discretion
33. Ingredient: Chocolate chips Reason: According to step 5, chocolate chips can be added if desired. Therefore, chocolate chips are not required to make the chocolate cake but may be used if the consumers prefer it.
34. List of ingredients, quantities and measurements, nutritional information, servings per recipe.
35. I think the word ‘delicious’ is included in the title to appeal to the senses of the viewer which will encourage them to try the recipe.
36. Yes, I think it is important for the steps to be numbered as the recipe must be done in the sequence outlined otherwise the result will not be what is advertised.

ELA Test 8

1. passtime – pastime	7. cricket?	13. are – is
2. intrest – interest	8. Athletes	14. run – runs
3. exhilarating – exhilarating	9. athlete’s	15. began – begun
4. benifits – benefits	10. However,	16. worse – worst
5. shedule – schedule	11. things:	17. by – in
6. disiplined – disciplined	12. focus.	18. proper - properly

19. Some descriptors used are: wrinkled bright green, slimy green and yellow body
20. One literary device used throughout the passage is metaphor <ul style="list-style-type: none"> o “slabs of wood” (line 9) o “world of literature” (lines 30-31)
21. Rectify – correct, change, solve Frantically – anxiously, wildly, desperately
22. Quality- Efficient. Line 8 Quality- Loves to learn, Line 30, 31 Quality- Organized Lines 8,11 -12
23. I think Willy was able to explain everything about the book because he read it every day for approximately the past twenty years. Since he read it so often for such a long time, he possibly became very familiar with the book and remembered everything about it and thus was able to explain it to the librarian.
24. Mood – relief, enlightened.

Reason – Others can now learn the lessons from the book and benefit. He realized that there was an entire library of books to now explore and learn more.
25. From the last paragraph of the passage (lines 26-31), I learnt that: <ul style="list-style-type: none"> although you may have been doing the same thing for a very long time, change is not a terrible thing and comes in many different ways and it should be viewed as an opportunity to better yourself although you may be sad/ gloomy about a certain situation, look on the bright side/ try to focus on the positives although you may look at some situation as a loss to you, it can also be viewed as a gain to others [seek the betterment of others]
26. In the poem Hurricane Ian is described as unfriendly, loud, destructive and robust.
27. This line makes use of personification.
28. Sense – Sound The roaring, the pounding; The banging on the doors.
29. This line means that things as they knew it would be ending and the situation would be completely different and new.
30. The mood of the first stanza of the poem is one of destruction and invasion. Line 1 and 2 supports my answer.
31. The villagers seemed to be physically prepared for the storm because it says, in lines 16-17 of the poem, “Yes, we were aware And yes, we anticipated.” However, I do not believe that the villagers were mentally ready because of the lines that follow, lines 18-19, “But no one was ready, For the end of our norm.”
32. The line suggests that because there is now a period of calm, the villagers might think the hurricane is over. However, they are possibly experiencing the eye of the hurricane and soon the power of it will continue.
33. Two pieces of information that should be included are: location of stores and contact information.
34. Someone may wish to purchase this body scrub to remove dead skin or to clean pores. Someone may also want to treat their skin to become smooth and soft or may be attracted to the fact that it is a natural based product.
35. Benefits – to encourage the customer to purchase the product by showing how it can improve their skin. Ingredients – some may have allergies. some may be looking for a particular ingredient in order to decide if to purchase or not.
36. The offer is one that you may not get anywhere else or again at the store. It offers huge savings.

ELA Test 9

1. exotik – exotic	7. Centre – Centre?	13. timid – timidly
2. farway – faraway	8. northern - Northern	14. ran – run
3. contries - countries	9. birds.	15. consumes – consume
4. esential – essential	10. these,	16. it – they
5. fiber - fibre	11. animals:	17. with – by
6. digestian – digestion	12. Yes!	18. venom – venomous

19. According to the passage, the two possible origins of cricket are: 1: England 2: Punjab regions of Southern Asia
20. The West Indies cricket team is formed by the Caribbean nations.
21. The main idea of the paragraph is that the game of cricket has evolved with new rules for the modern game added in mid 1970s.
22. “Despite the outcome” means no matter what the outcome of the game is, that is win, lose or draw.
23. The game is very competitive among the Caribbean Islands. However it is still played with enjoyment, pleasure and respect among all countries.
24. To provide facts on the origin of the cricket and explain why continues to be one of the Caribbean’s favourite sport.

25. Yes, I believe so since it has a lot of history, it is loved by the people of all Caribbean islands and it is home to the greatest batsman, Brian Lara.
26. In the poem lions are mentioned along with a warning.
27. One literary device used throughout the poem is repetition. An example of this device is seen at the beginning of each stanza, which states, "O what fun it must be, To live deep within the jungle."
28. Territory – area, zone, region. Impact – power, influence, effect
29. The rivers may be growing because: <ul style="list-style-type: none"> • when they get full, they overflow onto the banks which become a part of the river. <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • the water may cut into the banks/ land and make the channels wider.
30. In the first two stanzas the poet mentions jungle animals and what they do. However in the last two stanzas the poet uses the images of rivers, trees, mountains and valleys to create images in the readers mind.
31. The poet wants to emphasize the idea or feeling that living deep within the jungle would be filled with enjoyment
32. Yes/ No . Teacher’s discretion. Answer relates to the poem along with student’s opinion
33. Destination: Emperor Valley Zoo Date: 16 th March 2023
34. Strict – constant Confirm – agree, indicate , approve
35. The pictures of zoo animals may excite students and encourage participation. The field trip is to a zoo so the picture helps with the purpose of the consent form.
36. It provides important information to the parent about time, place and where the students will be going. It lets the teacher know that approval has been given by the parent. It contains contact information for the teacher in case of an emergency.

ELA Test 10

1. vitale – vital	7. home,”	13. since – until
2. bevragas – beverages	8. me!	14. past – passed
3. responsible – responsible	9. Arrakis,	15. choose – chose
4. genarating - generating	10. food.	16. me – I
5. avialable - available	11. there?	17. whom - who
6. caffiene - caffeine	12. “ Dune”	18. were - was

19. According to the passage, the children were looking forward to learn the story behind a scar on their grandfather’s arm.
20. The incident in the passage took place during a robbery. A line from the passage to support my answer is: - “we noticed three thieves attempting to rob our neighbour,...”- line 23 - “Since there were three thieves and three of us, we each chose one and went after them.” -lines 31-32
21. Wee – tiny, little, small Enthralling – gripping, fascinating.
22. He was full of confidence, he was the strongest, most muscular.
23. The children would appreciate it more than the adults, The story was not true so only children may believe it Grandma would object because the story was violent
24. I think the grandfather and his friends deserved the title “Hero” because they captured the thieves and prevented the robbery, which is an act of heroism.

25. Quality – bravery Grandpa risked his life to protect his aunts home and his friends, love for children Grandpa makes time to tell stories to his grandkids and never forgot, caring for others Grandpa tried to make sure his aunt’s home was not robbed.
26. Charles was different to the others in his class because he wore glasses.
27. Loathed – hated, detested Pounced – tackled, attacked.
28. He was bullied, he had no friends, he was laughed at
29. This suggests that the story took place in his younger years, and he is now ready to reveal his past life as it was probably difficult to do so before.
30. The line is explaining that the incident will cause so much hurt not only physically but emotionally that it will affect him/ her for life.
31. Mood – torment, sadness, hurt Line – “And how I loathed them, Filled with mostly tears.”
32. Teacher’s Discretion , title must connect to poem.
33. Log in, smartelearner.com
34. The website offers so many new options for learning through activities, worksheets , games etcetera that the user would have continuous use for it.
35. Two details are: free access and a deadline for registration.
36. Parents – parents can use the webpage to review their child’s activities and performance. Teachers- Teachers can use the website to reinforce topics, get worksheets and use activities to teach new topics.

ELA Test 11

1. speechless – speechless	7. remotely?	13. does – do
2. presant – present	8. Japan,	14. goes – go
3. helmit – helmet	9. homeowners’	15. or – and
4. equipment - equipment	10. steps:	16. chunky – chunkier
5. traffick – traffic	11. software,	17. are - is
6. vigilence – vigilance	12. It’s	18. close – closely

19. Chocolate becomes bitter when there are no additives such as cream milk or sugar.
20. Indicates – points out, shows Prized – cherished, loved
21. Cacao seeds are fermented, dried, purified and roasted. Then, the nibs a removed and the nibs are ground into a mass. After it is heated into a liquid which is cooled into a cocoa solids and cocoa butter.
22. 1. Milk chocolate is sweet while dark chocolate is bittersweet. 2. Milk chocolate has more additives and sugar while dark chocolate has less sugar and additives.
23. This chocolate bar will taste bitter since it contains a high percentage of cocoa - 70%.
24. Yes, since it contains less additional sugar, condensed milk and additives which can be unhealthy, when compared to other types of chocolate.
25. The purpose is to present interesting facts on the three main types of chocolate: milk, dark and white. Also to explain the steps in the chocolate making process and why it remains popular worldwide.
26. Oscar is a dog. A line from the poem to support my answer is: - “I bought Oscar a brand-new chew toy” - line 1 - “He even stopped wagging his tail.” - line 6 - “I searched and searched for the rubber bone,” - line 7 - “But Oscar barked, “Wait, what’s that?””- line 19 - ““It’s another fluffy little hound.”” - line 20
27. Personification - Poor Oscar seemed so distraught

Metaphor - the four-legged thief, the cutest robber
28. The meaning of the word distraught as used in the poem is helpless/ not knowing what to do next/ clueless of what is going to happen afterwards and how to deal with it.
29. At the beginning the mood is a troubled and worried one however at the end it is one of joy and care. Both Oscar and his owner were worried about the disappearance of the toys. He didn't like to see his pet so distraught but this all changed to joy when the mystery was solved and the owner took in the stray, Clover.
30. 1. Poor Oscar's frown made me sympathetic. I had to make it up to him. 2. But he still didn't have an owner. I took him home
31. 1. Since he didn't have an owner he didn't have anyone to care for him 2. Clover got along well with Oscar so they would not be lonely. Oscar's owner has a love for stray animals.
32. He is kind hearted and He loves animals. He couldn't stand to see his pet sad so he constantly replaced the missing toys. Also he willingly took in a stray just to make Oscar happy.
33. Fab Food is responsible, and it ends at the end of July.
34. The serving size is indicated as well as that it is spicy and vegan.
35. To grab the reader's attention. To make it easy for customers to see what's available at a glance. To make the meals seem like large portions and delicious.
36. Location, contact number – so that customers can call to place an order or visit the outlet to make purchases.

ELA Test 12

1. brilliant – brilliant	7. “The	13. mimic – mimics
2. vakation – vacation	8. It?”	14. good – well
3. anually - annually	9. far,	15. friendly – friendlier
4. outragous – outrageous	10. Using	16. itself – themselves
5. fourty – forty	11. “The	17. trim – trimmed
6. adolesent - adolescent	12. travelling:	18. that – who




19. The character in the passage is possibly a lawyer. A line from the passage to support my answer is, “I parked in my usual spot and made my way to the glass building of the law firm, right on time.”
20. There is never anything different to add a touch of excitement. Eight hours until I can go back to doing absolutely nothing else with my life. Eerie sense in the atmosphere welcomed me.
21. The meaning of the following words as used in the passage are: - monotonous- boring as it is the same thing being repeated everyday - frantically- in a hurried/ anxious manner
22. 1. Simile 2. Metaphor
23. The mood at the beginning is one of frustration and sadness because of the job. However at the end, the lawyer is in an optimistic mood and full of glee since he has his puppies to make him happy. He now has something to wake up to .
24. A change in his routine / Something to look forward to in his day. Something to care about other than his job. Evidence - Now, I do not feel a dark cloud lingering above my head whenever it is time to wake up / I am now excited and overwhelmed with joy
25. He is lonely/ miserable/ unhappy with his life / job Reason – He has no one to spend time with other than the same people and places every day. He just needed something to make him feel cared for/ loved/ brighten his day/ change of routine.
26. Simile - A voice as pure as an angel.

Metaphor - A fire that burns so deep from within
27. One metaphor used in the poem is “A fire that burns” in line 1.
28. These lines mean that the speaker felt as though the performance was so amazing that it was able to touch the intangible, that is his/her soul.
29. Mood – awe, admiration Reason – the poet compares the performance to something amazing. He/ she says that the performance was so perfect that it touched the poet’s soul.
30. Yes, it was perfect. Line - No tune was lost, no beat was missed.
31. Donned- dressed in, put on Fathom - understand
32. The performance of a lifetime. The best I’ve Seen, Perfect! Reason – teacher’s discretion
33. Water, hurricane kit, canned food, torchlight.
34. A damaged home – this reminds people of the power of hurricanes so they should seek shelter and secure their homes. Money – since hurricanes can cause loss of property and injuries, people should have a plan to cover their losses.
35. This means that people often think that hurricanes would not affect them but in reality hurricanes should be taken seriously as it can lead to loss of life and destruction to property.
36. Emergency contact numbers – so that anyone affected or injured can call for help or get updates. Addresses of shelters – so that if there is damage to property people will know where they can get shelter, food and clothing. Websites – so that you can get important updates on hurricanes and other information such as contacts and how to prepare .

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 1

1.	Five hundred and forty-two thousand, six hundred and three.
2.	100% is equivalent to 1 =
3.	$\frac{150}{12} = 12\frac{6}{12} = 12\frac{1}{2}$ Answer: 13 pizzas
4.	800 300.05
5.	$13^2 - \sqrt{100} = 169 - 10 = 159$ Answer: 159
6.	30000
7.	$\frac{39^{13}}{60_{21}} \times \frac{100^5}{1} = 65\%$ Answer: 65%
8.	$\frac{1}{3} \times \frac{12}{1} = 4$ Shade any 4 pieces
9.	$\frac{4}{100} = \frac{1}{25}$ Answer: $\frac{1}{25}$
10.	$\frac{4}{5} - \frac{7}{15}$ $\frac{12 - 7}{15} = \frac{5}{15} = \frac{1}{3}$ Answer: $\frac{1}{3}$
11.	$10\frac{1}{2} \text{ kg} = 10.5 \times 1000 = 10500 \text{ g}$ Answer: 10,500 grams
12.	$\frac{336^{56}}{60_{10}} = 5.64$ Answer: 5.6 or $5\frac{3}{5}$ hours
13.	$3.5 \times 1 \text{ cm}^2 = 3.5 \text{ cm}^2$ Answer: 3.5 cm^2


SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 1

14.	$1.75L = 1.75 \times 1000 = 1750ml$ Answer: 1750 millilitres
15.	Cylinder
16.	Larger than
17.	Equilateral triangle
18.	$Students\ represented = 9 \times 2 = 18$ $Students\ not\ represented = 24 - 18 = 6$ $Students\ needed = \frac{6}{2} = 3$ <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">Red</div> <div style="display: flex; gap: 10px;">  </div> </div> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">Blue</div> <div style="display: flex; gap: 10px;">  </div> </div> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">Purple</div> <div style="display: flex; gap: 10px;">  </div> </div>
19.	$14 - 9 = 5$ Answer: 5 students
20.	$Sum = 8 + 8 + 11 = 27kg$ $Mean = \frac{S}{A} = \frac{27}{3} = 9$ Answer: 9kg
21.	$Total\ sets = 45 + 50 = 95$ $Total\ books = 95 \times 18 = 1710$ Answer: 1710 books
22.	$\frac{1}{7} = 24$ $\frac{7}{7} = 24 \times 7 = 168$ $0.5 = \frac{1}{2} = \frac{1}{2} \times \frac{168}{1} = 84$ Answer: 84

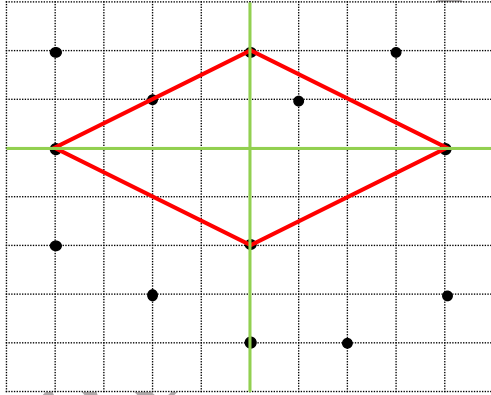
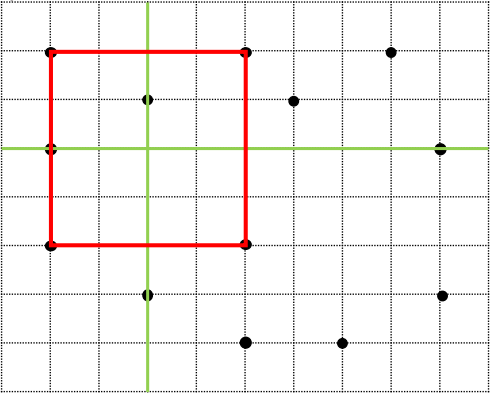
SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 1

23.	$\text{Shade} = \frac{1}{3} \times \frac{48}{1} = 16 \text{ blocks}$
24.	$\text{Spent} = \frac{2}{5} + \frac{1}{4} = \frac{8+5}{20} = \frac{13}{20}$ $\text{Remained} = 1 - \frac{13}{20} = \frac{7}{20}$ <p>Answer: $\frac{7}{20}$</p>
25.	<p>A square number is the result of the product of a number by itself while a factor of a number is any number that can be divided exactly by the number. Therefore, Kamala's answer is not fully correct. The number 32 is not a factor of 16 but 4 is. Additionally, 145 is not a perfect square number while 25 is. Thus, Kamala's answer is not correct.</p>
26.	$\text{Desired profit} = \frac{15}{100} \times \frac{5000}{1} = \750 $\text{Desired SP} = 5000 + 750 = \5750 $\text{Discount} = \frac{10}{100} \times \frac{6100}{1} = \610 $\text{Actual SP} = 6100 - 610 = \5490 $\text{Actual profit} = 5490 - 5000 = \490 <p>Answer: In order for Jeffrey to make the 15% profit, he would have to sell the air conditioner for \$5750. However, if he allows the 10% discount on the \$6100, he would be selling it for \$5490 and would only make \$490 profit as opposed to \$750.</p>
27.	$\text{CP of 1 pencil} = \frac{66}{44} = \frac{3}{2} = \1.50 $\text{CP of 2 pencils} = 1.50 \times 2 = \3.00 $\text{Profit on 2 pencils} = \$3.50 - \$3.00 = \0.50 $\text{Group of pencils sold} = 44 \div 2 = 22$ $\text{Total profit} = 22 \times 0.50 = \11.00 <p>Note: Flare made a profit of \$0.50 each time she sold 2 pencils</p> <p>Answer: \$11.00</p>
28.	$\text{Money spent on muffins or bagels} = 252 \div 2 = 126$ $\text{Groups of muffins purchased} = \frac{126}{9} = 14$ $\text{Number of muffins purchased} = 14 \times 5 = 70$

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 1

	<p>$Groups\ of\ bagels\ purchased = \frac{126}{7} = 18$</p> <p>$Number\ of\ bagels\ purchased = 18 \times 3 = 54$</p> <p>$Total\ bagels\ and\ muffins = 54 + 70 = 124$</p> <p>Answer: 124</p>
29.	<p>9:00a.m. + 8 hours = 5:00p.m.</p> <p>5:00p.m. + 30 minutes = 5:30p.m.</p> <p>5:30p.m. + 45 minutes = 6:15p.m.</p> <p>Answer: 6:15p.m.</p>
30.	<p>$P = (L + B) \times 2 = (49 + 27) \times 2 = 76 \times 2 = 152m$</p>
31.	<p>3 bananas = 165g</p> <p>12 bananas = $165 \times 4 = 660g$</p> <p>4 pineapples = $1332g - 660 = 672g$</p> <p>1 pineapple = $672 \div 4 = 168g$</p> <p>Answer: 168 grams</p>
32.	<p>The area of a polygon is the number of square units inside the polygon. Unlike perimeter, area is two-dimensional and is found by the product of the length and the width. Since a square has four equal sides, the area is found by multiplying the side by itself as shown above.</p> <p style="text-align: center;">$A = S \times S = S^2$</p>
33.	
34.	<p>Answer: $\frac{3}{4}$</p>
35.	<p>$11.5 \times 16 = 184$</p> <p>Answer: 184 students</p>
36.	<p>Answer: Free Response</p> <p>Yes, more gardening tools should be ordered as it was the second most sold product. Therefore, the sold outdoor appliance items should be replaced as future sales can be anticipated.</p>
37.	<p>Men = 30%</p> <p>Women = $0.2 = 20\%$</p>

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 1

	<p>$Children = 100\% - 30\% - 20\% = 50\%$</p> <p>$Girls = 50\% \div 2 = 25\%$</p> <p>$= \frac{25}{100} \times \frac{1500}{1} = 375$</p> <p>$= 375 \times \\$75 = \\$28,125$</p> <p>Answer: \$28,125</p>
38.	<p>$4 \text{ posts} + 3 \text{ spaces} = 575\text{cm}$</p> <p>$4 \text{ posts} = 50 \times 4 = 200\text{cm}$</p> <p>$3 \text{ spaces} = 575 - 200 = 375\text{cm}$</p> <p>$1 \text{ space} = 375 \div 3 = 125\text{cm}$</p> <p>$48 \text{ posts} = 50 \times 48 = 2400\text{cm}$</p> <p>$48 \text{ spaces} = 125 \times 48 = 6000\text{cm}$</p> <p>$Perimeter = 2400 + 6000 = 8400\text{cm} = 8400 \div 100 = 84\text{m}$</p> <p>Answer: 84 metres</p>
39.	<div style="display: flex; justify-content: space-around; align-items: center;">  OR  </div>
40.	<p>$Incorrect \text{ sum} = M \times A = 18 \times 30 = 540\text{cm}^3$</p> <p>$Removing \text{ incorrect values} = 540 - 25 - 34 = 540 - 59 = 481$</p> <p>$Adding \text{ correct values} = 481 + 52 + 43 = 576$</p> <p>$Correct \text{ mean} = \frac{S}{A} = \frac{576}{18} = 32\text{cm}^3$</p> <p>Answer: 32cm^3</p>

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 2

1.	223,012
2.	$1472 - 828 = 644$
3.	$\frac{429}{11} = 39$
4.	$B = 18 \div \frac{1}{9} = \frac{18}{1} \times \frac{9}{1} = 162$
5.	4
6.	$\frac{11}{12} - \frac{3}{4} = \frac{11}{12} - \frac{9}{12} = \frac{2}{12} = \frac{1}{6}$
7.	$\frac{5}{9} \times \frac{108}{1} = 60$
8.	$8\frac{1}{2}$
9.	$\frac{45}{100} \times \frac{60}{1} = 27$
10.	$Total = \$3.75 \times 3 = \11.25 $Change = \$20.00 - \$11.25 = \$8.75$
11.	13.5cm
12.	7:23
13.	$Left\ side = 1.8kg = 1800g$ $Right\ side = 300g \times 2 = 600g$ $To\ balance = 1800 - 600 = 900g$ $300g\ blocks\ needed = \frac{900}{300} = 4$
14.	$6L = 6000ml$ $\frac{6000}{300} = 20$
15.	Yes, the letter shown is symmetrical.
16.	Triangular prism
17.	B
18.	$Sum = 67 + 89 + 0 + 100 + 94 = 350$ $Mean = \frac{Sum}{Amount} = \frac{350}{5} = 70$

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 2

19.	27		
20.		Number of students	Tally
	Chips	13	### ### III
21.	<p><u>Option 1</u></p> $5n = 3240$ $1n = \frac{3240}{5} = \$648$ <p><u>Option 2</u></p> $3n = 2634$ $1n = \frac{2634}{3} = \$878$ <p>Answer: Option 1</p>		
22.	<p><i>Total amount shared</i> = $\frac{1}{8} = \\$7.50 \times 3 = \\22.50</p> <p><i>Allowance</i> = $\frac{8}{8} = \\$22.50 \times 8 = \\180</p>		
23.	<p>30 shirts = \$2400</p> $1 \text{ shirt} = \frac{2400}{30} = \80 <p>11 shirts = $\\$80 \times 11 = \\880</p>		
24.	<p>Josh = $2\frac{1}{3}m$</p> $\text{Jeremy} = 2\frac{1}{3} + \frac{5}{6} = \frac{19}{6} = 3\frac{1}{6}m$ $\text{Adam} = 3\frac{1}{6} - \frac{3}{2} = 1\frac{2}{3}m$		
25.	<p>Blocks = $8 \times 7 = 56$</p> $\text{Shade} = \frac{1}{8} \times \frac{56}{1} = 7$ <p>Shade any 7 blocks</p>		
26.	<p>Remove Indra's bill from the question.</p> <p>Since the cost of a cup of coffee is twice the cost of a slice of cake;</p>		

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 2

	<p style="text-align: center;">$1 \text{ coffee} = 2 \text{ cakes}$</p> <p>Looking at Carol</p> <p style="text-align: center;">$3 \text{ coffee} + 2 \text{ cakes} = \\64</p> <p>Therefore,</p> <p style="text-align: center;">$6 \text{ cakes} + 2 \text{ cakes} = 8 \text{ cakes} = \\64</p> <p style="text-align: center;">$1 \text{ cake} = \frac{\\$64}{8} = \\$8$</p> <p>Therefore, the cost of one cup of coffee can be calculated</p> <p style="text-align: center;">$1 \text{ coffee} = 2 \times \\$8 = \\$16$</p>
27.	<p>Prime numbers are numbers whose only factors are 1 and itself. 83 is an example of a prime number since 1 and itself (83) are its only factors. Composite numbers are numbers that have three or more factors. In other words, numbers that are not prime numbers are composite numbers. For example, 27 is a composite number as 1,3,9, and 27 are factors.</p>
28.	<p>$Pamela = 54^2 = 54 \times 54$</p> <p>$Kyle = 54 \times 45$</p> <p>Pamela's answer will yield 54 groups of 54 while Kyle's answer will yield 45 groups of 54. Therefore, Pamela's answer will be greater as her answer contains more groups of 54 than Kyle's.</p>
29.	<p>$Ran = \frac{1}{4} \times \frac{2000}{1} = 500m$</p> <p>$\frac{2}{5}km = 400m$</p> <p>$Total = 500 + 400 = 900m$</p> <p>$Remainder = 2000 - 900 = 1100m = \frac{1100}{2000} = \frac{11}{20}$</p>
30.	<p>$4.5m - 1.75m = 2.75m$</p>
31.	<p style="text-align: center;">$Area \text{ of } A = S \times S = 50 \times 50 = 2500cm^2$</p> <p style="text-align: center;">$Area \text{ of } B = S \times S = 0.5 \times 0.5 = 0.25m^2$</p> <p>The area of A is equal to the area of B. This is so because both squares are of the same dimensions, because 50cm is equivalent to 0.5m, the dimensions are just in different</p>

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 2

	units. Therefore, the area of A is equivalent to the area of B. Thus, 2500cm^2 is equivalent to 0.25m^2 .								
32.	<p>$Total\ break = 1:00 + 0:20 = 1:20$ $Length\ of\ school\ day = 8:50\text{a.m. to }3:00\text{p.m.} = 6\text{ hours }10\text{ minutes}$ $Class\ time = 6:10 - 1:20 = 4\text{ hours }50\text{ minutes} = (4 \times 60) + 50 = 240 + 50 = 290\text{ minutes}$</p>								
33.	<p>The pattern is a repeating pattern. A repeating pattern is one where a group of elements of the pattern is constantly recurring. This repeating unit is called the core. The core of this pattern is shown below.</p> <p style="text-align: center;">○ □ △ △</p>								
34.	<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Properties</th> <th style="width: 50%;">Name of solid</th> </tr> </thead> <tbody> <tr> <td>Three faces</td> <td>a) Cylinder</td> </tr> <tr> <td>Twelve equal edges</td> <td>b) Cube</td> </tr> <tr> <td>Four vertices</td> <td>c) Triangular based pyramid</td> </tr> </tbody> </table>	Properties	Name of solid	Three faces	a) Cylinder	Twelve equal edges	b) Cube	Four vertices	c) Triangular based pyramid
Properties	Name of solid								
Three faces	a) Cylinder								
Twelve equal edges	b) Cube								
Four vertices	c) Triangular based pyramid								
35.	<p>$Saved = 5 + 9 + 15 + 7 = 36$ $Average\ saved = \frac{S}{A} = \frac{36}{4} = \\9</p>								
36.	<p>$Sum\ of\ 11\ numbers = M \times A = 7 \times 11 = 77$ $Sum\ of\ 10\ numbers = 77 - 13 = 64$ $Mean = \frac{S}{A} = \frac{64}{10} = 6.4\text{ or }6\frac{2}{5}$</p>								
37.	<p>a)</p> <p>Since $\frac{4}{7}$ voted, $1 - \frac{4}{7} = \frac{3}{7}$ did not vote.</p> <p>$\frac{3}{7} = 2940$</p>								

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 2

$$\frac{7}{7} = \frac{2940}{3} \times \frac{7}{1} = 6860$$

$$\frac{2401}{6860} \times \frac{100}{1} = 35\%$$

b)

$$\frac{4}{7} = \frac{4}{7} \times \frac{6860}{1} = 3920$$

$$B = 3920 - 2401 = 1519$$

38. *Blocks to fill box = $L \times B \times H = 4 \times 2 \times 3 = 24$ blocks*

Blocks in box:

$$4 \times 1 = 4$$

$$1 \times 2 = 2$$

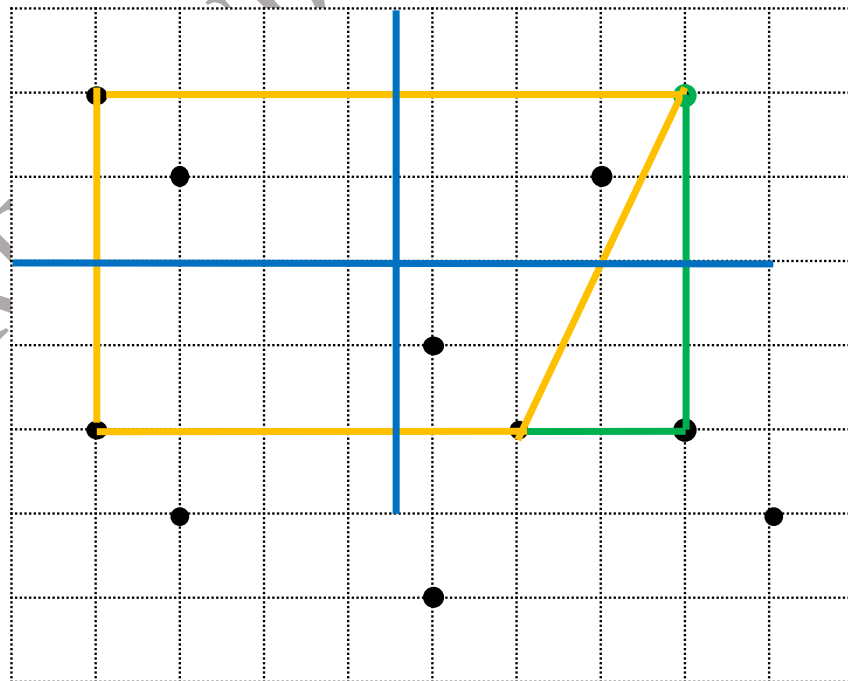
$$2 \times 3 = 6$$

$$\text{Total} = 4 + 2 + 6 = 12$$

$$\text{Volume of each box} = \frac{3000\text{ml}}{24} = 250\text{ml}$$





$$\text{Volume to fill container} = 24 \times 250\text{ml} = 6000\text{ml}$$

39.



SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 2

40. a)

Shantel	
Shawnte	
Shevelle	
Shaydon	

 = 4 phone calls

b)

I think if a pictograph is used it will be more effective than a tally table to show the data to Standard 3 students because the students may be more interested in a chart with symbols rather than strokes and may be inclined to be more attentive.

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SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 3

1	Eight hundred and five thousand, five hundred and eighty-eight.																						
2	1 000 000, 998 000, 980 900, 908 809																						
3	<table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td style="border-right: 1px solid black; padding: 2px 10px;">2</td><td style="padding: 2px 10px;">1024</td></tr> <tr><td style="border-right: 1px solid black; padding: 2px 10px;">2</td><td style="border-top: 1px solid black; padding: 2px 10px;">512</td></tr> <tr><td style="border-right: 1px solid black; padding: 2px 10px;">2</td><td style="border-top: 1px solid black; padding: 2px 10px;">256</td></tr> <tr><td style="border-right: 1px solid black; padding: 2px 10px;">2</td><td style="border-top: 1px solid black; padding: 2px 10px;">128</td></tr> <tr><td style="border-right: 1px solid black; padding: 2px 10px;">2</td><td style="border-top: 1px solid black; padding: 2px 10px;">64</td></tr> <tr><td style="border-right: 1px solid black; padding: 2px 10px;">2</td><td style="border-top: 1px solid black; padding: 2px 10px;">32</td></tr> <tr><td style="border-right: 1px solid black; padding: 2px 10px;">2</td><td style="border-top: 1px solid black; padding: 2px 10px;">16</td></tr> <tr><td style="border-right: 1px solid black; padding: 2px 10px;">2</td><td style="border-top: 1px solid black; padding: 2px 10px;">8</td></tr> <tr><td style="border-right: 1px solid black; padding: 2px 10px;">2</td><td style="border-top: 1px solid black; padding: 2px 10px;">4</td></tr> <tr><td style="border-right: 1px solid black; padding: 2px 10px;">2</td><td style="border-top: 1px solid black; padding: 2px 10px;">2</td></tr> <tr><td style="border-right: 1px solid black; padding: 2px 10px;"></td><td style="border-top: 1px solid black; padding: 2px 10px;">1</td></tr> </table> <p style="text-align: center; margin-top: 10px;">$\sqrt{1024} = 2 \times 2 \times 2 \times 2 \times 2 = 32$</p>	2	1024	2	512	2	256	2	128	2	64	2	32	2	16	2	8	2	4	2	2		1
2	1024																						
2	512																						
2	256																						
2	128																						
2	64																						
2	32																						
2	16																						
2	8																						
2	4																						
2	2																						
	1																						
4	$7\frac{1}{3}$																						
5	$\frac{8}{20} = \frac{2}{5}$																						
6	$(2 \times 100) + (0 \times 10) + (8 \times 1) + \left(7 \times \frac{1}{10}\right) + \left(3 \times \frac{1}{100}\right)$ OR $(2 \times 100) + (0 \times 10) + (8 \times 1) + (7 \times 0.1) + (3 \times 0.01)$																						
7	$\frac{80_4}{100_5} \times \frac{90^{18}}{1} = 72$																						

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 3

8	$\frac{1485^{99}}{15_1} = 99$
9	100 000
10	$SP = 550 + 33.50 = \$583.50$
11	Metre
12	$1kg = 1000g$
13	17 th September 2022
14	$4\frac{1}{3} \times 60 = \frac{13}{3_1} \times \frac{60^{20}}{1} = 260$
15	A
16	No, the digit shown is not symmetrical.
17	Right-angle
18	$Sum = 20 + 19 + 15 + 13 + 18 = 85$ $Mean = \frac{Sum}{Amount} = \frac{85}{5} = 17$ Answer: 17
19	2
20	$B = 6 \times 8 = 48$ students
21	Multiples of 9: 9, 18, 27, 36, 45 $Sum = 9 + 18 + 27 + 36 + 45 = 135$ Answer: 135
22	$\frac{1}{5} = 44$ $\frac{5}{5} = 44 \times 5 = 220$

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 3

	$0.25 = \frac{1}{4} = \frac{1}{4} \times 220 = 55$ <p>Answer: 55</p>
23	$CP = \$6600$ $SP = 120 \times \$62 = \7440 $Profit = \$7440 - \$6600 = \$840$
24	$2 \times 4 = 8 \text{ cups of concentrate}$ *The cups of water increased by a factor of 4, thus, the cups of concentrate will also.
25	$Remaining\ apples = 56 + 34 - 15 = 75$ $Baskets = 75 \div 25 = 3 \text{ baskets}$
26	$Total\ spent = 0.375 + 0.1 = 0.475$ $Saved - 1 - 0.475 = 0.525 = 0.525 \times 120 = \63.00
27	<p>Since (56×40) is equivalent to 40 groups of 56 and (56×23) is equivalent to 23 groups of 56 then $(56 \times 23) + (56 \times 17)$ will be equal to 40 groups of 56, thus $B = 17$.</p>
28	$6\text{kg of rice} = \$43.20$ $1\text{kg of rice} = \frac{\$43.20}{6} = \$7.20$ $1\text{ unit of sugar} = \$7.20 - \$0.80 = \6.40 $3\text{ units of sugar} = \$6.40 \times 3 = \$19.20$ Answer: \$19.20
29	$3\text{ hours} = 3 \times 60 = 180\text{ minutes}$ $Rodeny\ took\ 180 - 43 = 137\text{ minutes}$ Answer: 137 minutes

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 3

30	<p>$1 \text{ rod} = 0.83\text{m} = 0.83 \times 100 = 83\text{cm}$</p> <p>$12 \text{ rods} = 83 \times 12 = 996\text{cm}$</p> <p>Answer: 996 centimetres</p>									
31	<p>$P = (L + B) \times 2 = (0.5 + 0.25) \times 2 = 0.75 \times 2 = 1.5\text{km} = 1.5 \times 1000 = 1500\text{m}$</p> <p>Answer: 1500 metres</p>									
32	<p>$50 \text{ boxes} = 50 \times 84\text{kg} = 4200\text{kg}$</p> <p>$\text{Free weight} = 4503 - 4200 = 303\text{kg}$</p> <p>$\text{More boxes} = \frac{303}{84} = 3r \dots = 3 \text{ boxes}$</p> <p>Answer: 3 boxes</p>									
33	<p>A scalene triangle has no equal sides and no equal angles. However, in an equilateral triangle, there are 3 equal sides and 3 equal angles.</p>									
34	<p>A cylinder has 3 faces, 2 flat faces and 1 curved face. There are 2 edges and no vertices in a cylinder.</p>									
35	<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 20%;">Points</th> <th style="width: 40%;">Tally</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Elizabeth</td> <td style="text-align: center;">16</td> <td style="text-align: center;"> </td> </tr> <tr> <td style="text-align: center;">Emmanuel</td> <td style="text-align: center;">12</td> <td style="text-align: center;"> </td> </tr> </tbody> </table>		Points	Tally	Elizabeth	16		Emmanuel	12	
	Points	Tally								
Elizabeth	16									
Emmanuel	12									
36	<p>$\text{Sum of 4 tests} = M \times A = 83 \times 4 = 332$</p> <p>$\text{New mean} = 83 + 7 = 90$</p> <p>$\text{Sum of 5 tests} = 90 \times 5 = 450$</p> <p>$\text{Mark} = 450 - 332 = 118$</p> <p>Answer: 118 marks</p>									

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 3

37

a)

$$\text{Empty Seats} = 1 - \frac{3}{4} = \frac{1}{4} = 32$$

$$\begin{aligned} \text{Full Theatre} + \text{Full Theatre} + \frac{3}{4} \text{ Full Theatre} &= 1 + 1 + \frac{3}{4} = 2\frac{3}{4} \\ &= \frac{11}{4} \text{ filled seats} \end{aligned}$$

$$\text{Since } \frac{1}{4} = 32 \text{ persons then } \frac{11}{4} = 11 \times 32 = 352 \text{ persons}$$

b)

$$\text{Theatre 1} = 32 \times 4 = 128 \text{ persons}$$

$$\text{Children} = 100\% - 62.5\% = 37.5\% = \frac{3}{8} \times 128 = 48$$

38

$$\text{Time Lianna arrived at school} = 8:30\text{am} + 0:10 = 8:40\text{am}$$

$$\text{Duration from school to work} = 9:15 - 8:40 = 35 \text{ minutes}$$




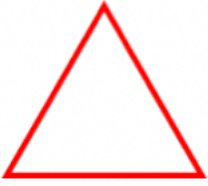
$$\text{Duration from home to school} = 35 - 14 = 21 \text{ minutes}$$

$$\text{Time Lianna left home for school} = 8:40 - 0:21 = 8:19\text{am}$$

$$8:30 - 8:19 = 11 \text{ minutes}$$

39

a)

Term 1	Term 2	Term 3	Term 4
			

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 3

	b) Term 4 is an equilateral triangle which has all equal sides and angles.
40	$Sum = 75 + 45 + 65 + 40 + 60 + 45 = 330$ $Mean = \frac{Sum}{Amount} = \frac{330}{6} = 55$ <p>Answer: Hidden Gems Co. should continue with the sale of their new product because an average of 55 of the items sold over a 6-month period which is more than the required minimum of 50. Thus, the minimum threshold was exceeded by 5 items and is therefore feasible.</p>

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SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 4

1.	0.09 or $\frac{9}{100}$		
2.	600		
3.	80,000	Tens of thousands	
4.	>		
5.	$\frac{65}{100} \times \frac{480}{1} = 312$		
6.	$1 - \left(\frac{2}{5} + \frac{1}{3}\right) = 1 - \left(\frac{6+5}{15}\right) = 1 - \frac{11}{15} = \frac{4}{15}$		
7.	$\frac{38}{100} = \frac{19}{50}$		
8.	$\frac{1}{7} = 32$ $\frac{7}{7} = 32 \times 7 = 224$		
9.	0.8, 0.79, 0.52, 0.37		
10.	\$46.40		
11.	$2.5\text{cm} \times 13 = 32.5\text{cm}$		
12.	5.5cm		
13.	19th		
14.	$1.3 \times 1000 = 1300\text{ml}$		
15.	Equilateral triangle		
16.	C or square		
17.	Triangular prism		
18.	$20 \times 10 = 200$		

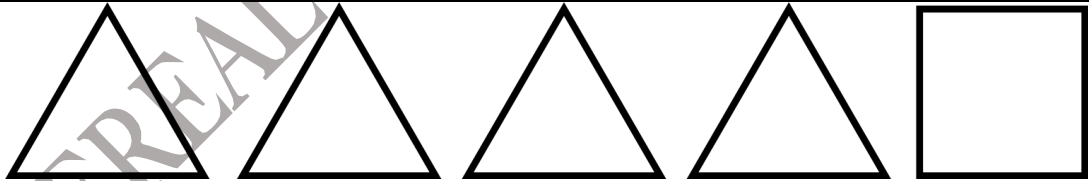
SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 4

19.	$\text{Sum} = 8 + 0 + 6 + 9 + 10 + 9 + 7 = 49$ $\text{Mean} = \frac{\text{Sum}}{\text{Amount}} = \frac{49}{7} = 7$
20.	$\text{Number of blocks} = \frac{60}{20} = 3$ <p>DRAW 3 BLOCKS</p>
21.	16, 64
22.	$\text{Car} = 100 - (16 + 37) = 100 - 53 = 47$ $\frac{47}{100} = 47\%$
23.	<p>a) 15</p> <p>b) 4, 49</p>
24.	$\text{Gave} + \text{Sold} = 20\% + 70\% = 90\%$ $\text{Rotton} = 100\% - 90\% = 10\% = 40$ $\frac{1}{10} = 40$ $\frac{10}{10} = 40 \times 10 = 400$
25.	$\text{Discount} = \frac{20}{100} \times \frac{1600}{1} = \320 $\text{Each sibling} = \frac{320}{4} = \80
26.	$SI = \frac{P \times R \times T}{100} = \frac{10\,000 \times 20 \times 4}{100} = \$8\,000$ $A = SI + P = \$8000 + \$10000 = \$18\,000$ $\text{Monthly instalment} = \frac{18000}{4 \times 12} = \375

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 4

27.	<p>Of 10 blocks</p> $\text{Sold} = \frac{1}{5} \text{ of } 10 \text{ blocks} = 2 \text{ blocks}$ $\text{Remaining} = 10 - 2 = 8 \text{ blocks}$ $\text{Donated} = \frac{5}{8} \text{ of } 8 \text{ blocks} = 5 \text{ blocks}$ $\text{Remaining} = 8 - 5 = 3 \text{ blocks}$ <p>SHADE ANY 3 BLOCKS</p>
28.	$\text{Unit Price} = \frac{12}{2} = \6.00 $\text{Cost} = 5.5 \times \$2.50 = \$13.75$ $\text{Total cost} = \$12.00 + \$13.75 + \$17.00 = \42.75
29.	$5p + 3w = 1000g$ $4w = 700g$ $1w = \frac{700g}{4} = 175g$ $3w = 175 \times 3 = 525g$ $5w = 1000 - 525 = 475g$
30.	$8:43a.m. \rightarrow 4:43p.m. = 8 \text{ hours}$ $8:43a.m. \rightarrow 4:51p.m. = 8 \text{ hours and } 8 \text{ minutes}$ <p>Paying for = 9 hours</p> $\text{Paid} = 9 \times 5 = \45

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 4

31.	<div style="text-align: center;"> <p>Route 1: $\overleftarrow{\hspace{15em}} \xrightarrow{9.9km = 9900m}$</p> <p>Route 2: $\overleftarrow{\hspace{10em}} \xrightarrow{7\frac{2}{5}km = 7400m}$</p> <p style="text-align: right;">$\overleftarrow{\hspace{10em}} \xrightarrow{9900m - 7400m}$ $2500m = 2\frac{1}{2}km$</p> </div> <p>From the diagram above it is clear that route 1 is longer than route 2 by $2\frac{1}{2}km$. I arrived at this answer by subtracting the distance of both route 1 and 2. Also, it is clear that route 1 is greater than route 2 as $9.9km$ is greater than $7\frac{2}{5}km$.</p>
32.	<p><i>Blocks to fill box = $L \times B \times H = 6 \times 5 \times 5 = 150$ blocks</i></p> <p><i>Blocks in box:</i></p> <p style="padding-left: 40px;">$1 \times 5 = 5$</p> <p style="padding-left: 40px;">$1 \times 3 = 3$</p> <p style="padding-left: 40px;">$10 \times 1 = 10$</p> <p style="padding-left: 40px;"><i>Total = $5 + 3 + 10 = 18$</i></p> <p><i>Blocks needed = $150 - 18 = 132$</i></p>
33.	
34.	<p>From the diagrams it can be deduced that both triangles are the same. In the first triangle, each side is 8cm which means it is an equilateral triangle and each angle inside is 60°. In the second triangle two 60° angles are labeled and since the angles in a triangle add up to 180° the third angle is 60°. Thus, since each angle is equal then</p>

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 4

	each side is equal. Therefore, both triangles are the same since each triangle has 8cm sides and 60° angles.			
35.		Points	Frequency	Total Points
		2	6	12
		4	4	16
		6	7	42
		10	8	80
36.	<p><i>Sum of 4 numbers = $M \times A = 53 \times 4 = 212$</i></p> <p><i>Sum of 2 known numbers = $36 + 44 = 80$</i></p> <p><i>Sum of 3rd and 4th numbers = $212 - 80 = 132$</i></p>			
37.	<p><i>Number of repackaged lollipops = $14 \times 28 = 392$</i></p> <p><i>Number of lollipops repackaged and remaining = $392 + 9 = 401$</i></p> <p><i>Total number of lollipops = $401 + 19 = 420$</i></p> <p><i>Each bag bought = $420 \div 28 = 15$ lollipops</i></p>			
38.	<p>a) <i>Area of square = $S \times S = 1 \times 1 = 1\text{cm}^2$</i></p> <p><i>Area of Figure 1 and Figure 2 = $1\text{cm}^2 \times 14\text{squares} = 14\text{cm}^2$</i></p> <p>b) The perimeter refers to the distance around. Since a square has four equal sides, the perimeter will be $P = S + S + S + S$ which can be reduced to $P = S \times 4$. Therefore, the perimeter of a square can be found by multiplying a known side by four.</p>			
39.	<p><i>Area of swimming pool = $L \times B = 17\text{m} \times 13\text{m} = 221\text{m}^2$</i></p> <p><i>Area of swimming pool and walk path = $L \times B = (17 + 2 + 2) \times (13 + 2 + 2)$</i></p> <p style="text-align: center;"><i>= $21 \times 17 = 357\text{m}^2$</i></p>			

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 4

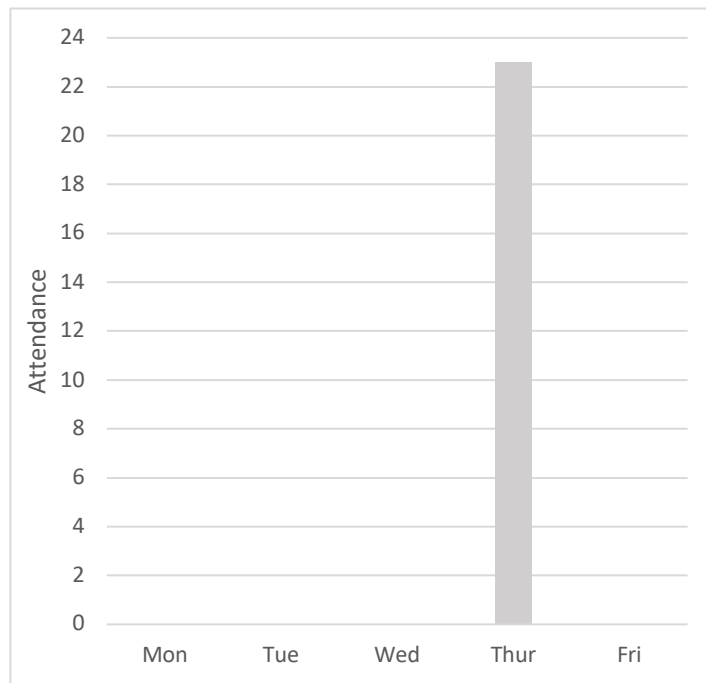
$$\text{Area of walk path} = 357 - 221 = 136\text{m}^3$$

$$\begin{aligned} \text{Tiles needed} &= \frac{\text{Total area}}{\text{Area of tile}} = \frac{136}{0.5 \times 0.5} = \frac{136}{0.25} = 136 \div \frac{1}{4} = 136 \times \frac{4}{1} \\ &= 544 \text{ tiles} \end{aligned}$$

40. a) $\text{Sum} = \text{Mean} \times \text{Amount} = 18 \times 5 = 90$

$$\text{Sum of known attendances} = 15 + 17 + 20 + 15 = 67$$

$$\text{Thursday} = 90 - 67 = 23$$



b) No, I think it is more effective to represent the data using a bar chart as it is easier to look at and simple to understand. Bar graphs also allow for easier interpretations than frequency tables, as proportions and patterns between categories are easier to identify.

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 5

1.	<table border="1"> <thead> <tr> <th>Digit</th> <th>Value</th> <th>Place Value</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">Thousands</td> </tr> </tbody> </table>	Digit	Value	Place Value	0	0	Thousands
Digit	Value	Place Value					
0	0	Thousands					
2.	Answer: $(4 \times 100000) + (8 \times 10000) + (1 \times 1000) + (0 \times 100) + (2 \times 10) + (8 \times 1)$						
3.	$Shaded = \frac{2}{6} = \frac{1}{3} = 0.3333$						
4.	214						
5.	$\frac{8}{24} = \frac{1}{3}$ Answer: $\frac{1}{3}$						
6.	$Sold = \frac{35^7}{100_2} \times \frac{460^{23}}{1} = 161$ Answer: 161 oranges						
7.	4000						
8.	$Spent = \frac{4}{5}$ $Remaining = 1 - \frac{4}{5} = \frac{1}{5} = 10$ $\frac{5}{5} = 10 \times 5 = 50$ Answer: \$50						
9.	$2506 \times 17 = 42\ 602$						
10.	$207 - 69 = 138$ Answer: 138 passengers						
11.	$982 \div 10 = 98.2cm$ Answer: 98.2cm						
12.	$1\ square = 1cm \times 1cm = 1cm^2$ $Shape = 16 \times 1cm^2 = 16cm^2$ Answer: $16cm^2$						
13.	2.5 kilograms						

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 5

14.	$\frac{312}{60} = 5.2 = 5\frac{1}{5}$ <p>Answer: 5.2 or $5\frac{1}{5}$</p>
15.	Trapezium
16.	Isosceles triangle
17.	Cone
18.	<p><i>Plot 1 and 2</i> = $6 \times 2 = 12$ trees</p> <p><i>Plot 3</i> = $16 - 12 = 4$</p> <p>Answer: 4 trees</p>
19.	<p><i>Sum</i> = $20 + 19 + 27 + 18 = 84$</p> <p><i>Mean</i> = $\frac{\text{Sum}}{\text{Amount}} = \frac{84}{4} = 21$</p> <p>Answer: 21</p>
20.	2
21.	Answer: $\sqrt{64}$ $\sqrt{100}$
22.	<p><i>Red and Black</i> = $1 - \frac{2}{5} = \frac{3}{5}$</p> <p><i>Red</i> = $\frac{3}{5} \div 2 = \frac{3}{5} \times \frac{1}{2} = \frac{3}{10} = \frac{3}{10} \times \frac{100}{1} = 30\%$</p> <p>Answer: 30%</p>
23.	<p>$\frac{1972^{986} 58}{3400^{171}} \times \frac{100}{1} = 58\%$</p> <p>Answer: 58%</p>
24.	<p>$0.1 + 3 + 0.07 = 3.17$</p> <p>Answer: 3.17</p>
25.	<p><i>Brian</i> = $180 + R$</p> <p><i>Raymond</i> = R</p> <p>$1000 - 180 = 820$</p> <p>$820 \div 2 = 410 = \textit{Raymond}$</p> <p>Answer: 410 coupons</p>
26.	<i>Regular wage</i> = $40 \times \$20 = \800

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 5

	<p><i>Overtime rate</i> = $1.5 \times \\$20 = \\30</p> <p><i>Overtime wage</i> = $10 \times \\$30 = \\300</p> <p><i>Total wage</i> = $\\$800 + \\$300 = \\$1100$</p>													
27.	Cupcakes	Muffins	Total	Pies										
	500	300	800	200										
	1000	<u>600</u>	1600	<u>400</u>										
	<p><i>Difference</i> = $600 - 400 = 200$</p> <p>Answer: 200 muffins</p>													
28.	<p>a) 9, 12, 7, 10, 5, 8, 3, 6, 1.</p> <p>b) Three is added to the first term then five is subtracted from the answer to get the second term. This is repeated.</p>													
29.	<p>$4:30 - 0:51 = 3:39 = 3 \text{ hours } 39 \text{ minutes} = (3 \times 60) + 41$</p> <p>$= 180 + 41$</p> <p>$= 219 \text{ minutes}$</p>													
30.	<p>$8000m + 700m + 2800m = 11500m$</p> <p>Answer: 11500 metres</p>													
31.	<p><i>Time arrived to work</i> = $8:10a.m. + 14 \text{ minutes} = 8:24a.m.$</p> <p><i>Duration to work</i> = $8:24 - 7:23 = 1:01 \text{ minutes} = 1 \frac{1}{60} \text{ hours} = 61 \text{ minutes}$</p> <p>Answer: 61 minutes</p>													
32.	<p><i>Mass of boxes</i> = $40 \times 46g = 1840g = 1.84kg$</p> <p><i>Total mass</i> = $1.84kg + 8.93kg = 10.77kg$</p> <p>Answer: 10.77 kilograms</p>													
33.	Triangular prism, cuboid, cube (Any two)													
34.	The triangles above are similar right-angles triangles. Each triangle has a right angle as its base is perpendicular to its height as shown on the grid. Additionally, each triangle is similar as the sides of triangles 2 and 3 are multiples of the sides of triangle 1.													
35.	<table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tbody> <tr> <td style="padding: 5px;">Name</td> <td style="padding: 5px;">Amy</td> <td style="padding: 5px;">Bella</td> <td style="padding: 5px;">Neil</td> <td style="padding: 5px;">Steve</td> </tr> <tr> <td style="padding: 5px;">Frequency</td> <td style="padding: 5px;">8</td> <td style="padding: 5px;">10</td> <td style="padding: 5px;">12</td> <td style="padding: 5px;">10</td> </tr> </tbody> </table>				Name	Amy	Bella	Neil	Steve	Frequency	8	10	12	10
Name	Amy	Bella	Neil	Steve										
Frequency	8	10	12	10										

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 5

36.	<p>$Each\ symbol = \frac{300}{20} = 15$</p> <p>$Blue - Yellow = 5 - 3 = 2\ symbols = 2 \times 15 = 30\ hours$</p> <p>Answer: 30 houses</p>												
37.	<p>$Mobile\ Express: Discount = \frac{15^3}{100_2} \times \frac{10860^{543}}{1} = \\1629</p> <p>Sale price = \$9231</p> <p>$Talk\ and\ Accessories: Discount = \frac{20^1}{100_{51}} \times \frac{11550^{2310}}{1} = \\2310</p> <p>Sale price = \$11550 - 2310 = \$9240</p> <p>Answer: R and K Cellular Products will give Dane the cheapest price for his desired smartphone. Although no additional discounts are given at R and K Cellular, the final price of \$9225 is still cheaper than the other 2 stores being considered.</p>												
38.	<p>$Each\ foil\ strip = 12 \times 0.45 = 5.4g$</p> <p>$Each\ box = 5.4g \times 4 = 21.6g$</p> <p>$Each\ carton = 21.6g \times 250 = 5375 = 5.375kg$</p> <p>$Volume\ of\ container = L \times B \times H = 4 \times 2 \times 3 = 24\ cartons$</p> <p>$Weight\ of\ container = 5.375 \times 24 = 129kg = 129\ 000g$</p> <p>Answer: 129kg or 129000g</p>												
39.	<p>a)</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 10%;">Week</th> <th>Pattern</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>○ ○ ◐</td> </tr> <tr> <td>2</td> <td>○ ○ ○ ○</td> </tr> <tr> <td>3</td> <td>○ ○ ○ ○ ○ ◐</td> </tr> <tr> <td>4</td> <td>○ ○ ○ ○ ○ ○ ○</td> </tr> <tr> <td>5</td> <td>○ ○ ○ ○ ○ ○ ○ ○ ◐</td> </tr> </tbody> </table> <p style="text-align: center; margin-top: 10px;">○ = 10 runs</p> <p>b)</p>	Week	Pattern	1	○ ○ ◐	2	○ ○ ○ ○	3	○ ○ ○ ○ ○ ◐	4	○ ○ ○ ○ ○ ○ ○	5	○ ○ ○ ○ ○ ○ ○ ○ ◐
Week	Pattern												
1	○ ○ ◐												
2	○ ○ ○ ○												
3	○ ○ ○ ○ ○ ◐												
4	○ ○ ○ ○ ○ ○ ○												
5	○ ○ ○ ○ ○ ○ ○ ○ ◐												

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 5

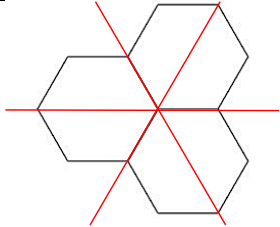
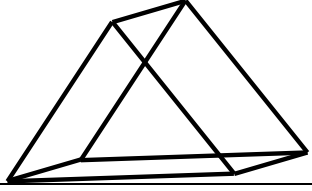
	<p>Answer: Yes, Bradley achieved his goal of saving at least \$80 in 5 weeks. On week 5 alone a sum of \$85 would have been accumulated which is more than he had set out to save.</p>
40.	<p>a)</p> $\text{Sum} = 15 + 10 + 25 + 15 + 20 = 85$ $\text{Mean} = \frac{\text{Sum}}{\text{Amount}} = \frac{85}{5} = 17$ <p>Answer: Ishmeal and Jake</p> <p>b) Free Response</p> <p>Answer: I think coach Miller should choose Zack for the cricket team. Although both Zack and Cody's score are above the average of 17, Zack has the higher score of the 2. Therefore, it can be assumed that Zack is the most prepared compared to the other players represented and should be selected.</p>

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SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 6

1	443,153
2	$12.5 > 0.125$ $>$
3	<i>Selling price</i> = \$756 – \$97 = \$659
4	$X - 2884 = 4953$ From number sentences: $X = 4953 + 2884 = 7837$ $\therefore A = 8$ Answer: 8
5	$12^2 = 144$ $144 - 93.6 = 50.4$ Answer: 50.4
6	$\frac{1}{5} = 23$ $\frac{5}{5} = 23 \times 5 = 115$ Answer: 115
7	$1\frac{4}{5}$
8	15.0
9	$\frac{3}{8}$
10	$\frac{45^9}{100_{21}} \times \frac{260^{13}}{1} = 117$ Answer: 117
11	1L = 1000ml
12	7:23
13	Square metres is not an appropriate unit as the length and width of a textbook cover will not exceed 1 metre.
14	18.43

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 6

15	Triangular prism
16	
17	
18	<i>D</i>
19	Difference = 1 symbol = 8 children
20	$\text{Sum} = 95 + 68 + 83 = 246$ $\text{Mean} = \frac{\text{Sum}}{\text{Amount}} = \frac{246}{3} = 82$
21	$\text{Water} = 12 \times \frac{5}{8} = 7\frac{1}{2}$ <p>Answer: 7</p>
22	$\text{Sold} = \frac{2}{3}$ $\text{Remaining} = 1 - \frac{2}{3} = \frac{1}{3} = \frac{1}{3} \times \frac{180}{1} = 60$ <p>Answer: 60 cupcakes</p>
23	$\text{Option 1} = \$3 \text{ for } 5 \text{ therefore } 1 = \frac{\$3}{5} = \$0.60$ $\text{Option 2} = \$6 \text{ for } 12 \text{ therefore } 1 = \frac{\$6}{12} = \$0.50$ $\text{Option 3} = \$0.70$ $\text{Option 4} = \$65 \text{ for } 100 \text{ therefore } 1 = \frac{\$65}{100} = \$0.65$ <p>Best buy is option 2.</p>
24	$\text{Discount} = \frac{15^3}{100_2} \times \frac{90}{1} = \frac{27}{2} = \13.50 $\text{SP} = \$90 - \$13.50 = \$76.50$

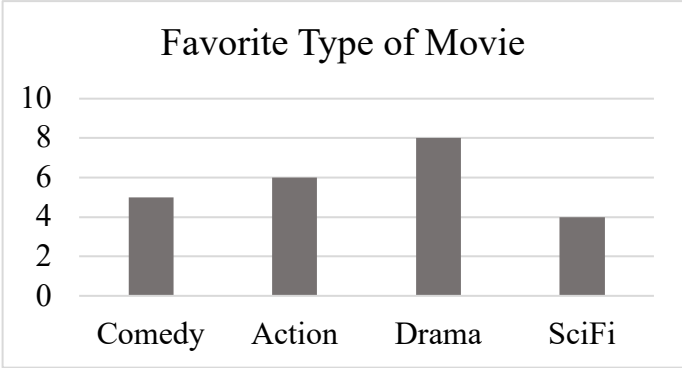
SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 6

	Answer: \$76.50										
25	<p><i>Regular hours</i> = $5 \times 8 = 40$ hours</p> <p><i>Regular wage</i> = $40 \times \\$25 = \\1000</p> <p><i>Overtime wage</i> = $\\$1825 - \\$1000 = \\$825$</p>										
26	<p><i>Drinks</i> = $3 \times \\$7.75 = \\23.25</p> <p><i>Snacks</i> = $9 \times \\$0.58 = \\5.22</p> <p><i>Total</i> = $\\$23.25 + \\$5.22 = \\$28.47$</p> <p><i>Change</i> = $\\$40 - \\$28.47 = \\$11.53$</p> <p>Answer: \$11.53</p>										
27	<p>$A = \frac{2}{5}$</p> <p>$Rem = 1 - \frac{2}{5} = \frac{3}{5}$</p> <p>$B = \frac{1}{2} \times \frac{3}{5} = \frac{3}{10}$</p> <p>$A + B = \frac{2}{5} + \frac{3}{10} = \frac{4}{10} + \frac{3}{10} = \frac{7}{10}$</p> <p>$Rem = C = \frac{3}{10} - \frac{7}{10} = \frac{3}{10} = \\180</p> <p>$\frac{1}{10} = \frac{180}{3} = \\60</p> <p>$\frac{10}{10} = \\$60 \times 10 = \\600</p> <p>OR Using a block diagram approach.</p> <table border="1" style="margin-left: auto; margin-right: auto; text-align: center; color: red;"> <tr> <td>A</td><td>A</td><td>A</td><td>A</td><td>B</td><td>B</td><td>B</td><td>C</td><td>C</td><td>C</td> </tr> </table> <p>$C = \frac{3}{10} = \\$180$</p> <p>$\frac{1}{10} = \frac{180}{3} = \\60</p> <p>$\frac{10}{10} = \\$60 \times 10 = \\600</p>	A	A	A	A	B	B	B	C	C	C
A	A	A	A	B	B	B	C	C	C		
28	<p>$SI = \frac{P \times R \times T}{100} = \frac{25000 \times 12.5 \times 4}{100} = \\12500</p> <p>$A = P + SI = \\$25000 + \\$12500 = \\$37,500$</p>										

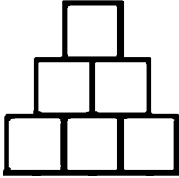
SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 6

29	$9:25 + 0:48 = 9:73 = 10:13$
30	<p>$1 \text{ side} = 1.2\text{m} = 120\text{cm}$</p> <p>$\text{Distance around} = \text{Perimeter} = S \times 4 = 120 \times 4 = 480\text{cm}$</p> <p>Answer: 480 centimetres</p>
31	<p>$\text{Total cubes needed to fill box} = L \times B \times H = 4 \times 3 \times 3 = 36$</p> <p>$\text{Cubes in box} = 8$</p> <p>$\text{Cubes still needed} = 36 - 8 = 28$</p> <p>Answer: 28 cubes</p>
32	<p>$\text{Apples} = 17 \times 58\text{g} = 986\text{g}$</p> <p>$\text{Bananas} = 2906\text{g} - 986\text{g} = 1920\text{g}$</p> <p>$\text{Each banana} = 1920\text{g} \div 20 = 96\text{g}$</p> <p>Answer: 96 grams</p>
33	<p>The diagram shows a 7x7 grid. A dashed diagonal line runs from the bottom-left corner (labeled B) to the top-right corner (labeled A). Two stepped paths are drawn: a black path and a red path. The black path starts at the second vertical line from the left, moves up to the third horizontal line, then right to the fourth vertical line, then up to the fifth horizontal line, then right to the sixth vertical line, and finally up to the sixth horizontal line. The red path starts at the fourth vertical line from the left, moves up to the fifth horizontal line, then right to the sixth vertical line, then up to the sixth horizontal line, and finally right to the seventh vertical line.</p>
34	<p>$1 \text{ face} = 4 \text{ right angle}$</p> <p>$6 \text{ faces} = 4 \times 6 = 24$</p>

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	Answer: 24 right angles										
35	<p>FREE RESPONSE</p> <p>Mr Ben should choose Zack and Cody as they scored the highest and second highest compared to the other students. Therefore, I believe they will require less preparation and time to master their mental mathematics skills compared to the others.</p>										
36	<div style="text-align: center;">  <p>Favorite Type of Movie</p> <table border="1"> <thead> <tr> <th>Movie Type</th> <th>Number of Votes</th> </tr> </thead> <tbody> <tr> <td>Comedy</td> <td>5</td> </tr> <tr> <td>Action</td> <td>6</td> </tr> <tr> <td>Drama</td> <td>8</td> </tr> <tr> <td>SciFi</td> <td>4</td> </tr> </tbody> </table> </div>	Movie Type	Number of Votes	Comedy	5	Action	6	Drama	8	SciFi	4
Movie Type	Number of Votes										
Comedy	5										
Action	6										
Drama	8										
SciFi	4										
37	<p>a)</p> $Charity = \frac{20}{100} \times \frac{4800}{1} = \960 $Remainder = 4800 - 960 = \3840 $Snacks = \frac{1}{4} \times \frac{3840}{1} = \960 $Remainder = 3840 - 960 = \2880 $Shared = \frac{5}{8} \times \frac{2880}{1} = 1800$ $Brother = 1800 \div 3 = \600 $Sister = 600 \times 2 = \1200 <p>Answer: \$1200</p> <p>b)</p> $Left = 2880 - 1800 = \$1080$ $\frac{1080}{4800} \times \frac{100}{1} = \frac{45}{2} = 22\frac{1}{2}\%$										

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 6

	Answer: $22\frac{1}{2}\%$																				
38	<p><i>Side of square</i> = $1200\text{cm} = 12\text{m}$</p> <p><i>Perimeter of square</i> = $S \times 4 = 12 \times 4 = 48\text{m}$</p> <p><i>Width of rectangle</i> = $\frac{12}{3} = 4\text{m}$</p> <p><i>Perimeter of rectangle</i> = $(L + B) \times 2 = (20 + 4) \times 2 = 24 \times 2 = 48\text{m}$</p> <p>The perimeter of the square is 48m (or 4800cm) which is equivalent to the perimeter of the rectangle which is also 48m (or 4800cm). Therefore, with respect to perimeter, the distance around both the square and the rectangle is the same.</p>																				
39	<p>a)</p> <div style="text-align: center;">  </div> <p>b) The pattern is generated by adding one square to the last row of squares from the previous term. This new row is then combined to the last row of the previous term to create the next term in the sequence.</p>																				
40	<table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 5px;">Points</th> <th style="padding: 5px;">Frequency</th> <th style="padding: 5px;">Tally</th> <th style="padding: 5px;">Total Points</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">2</td> <td style="padding: 5px;">7</td> <td style="padding: 5px;"> </td> <td style="padding: 5px;">14</td> </tr> <tr> <td style="padding: 5px;">5</td> <td style="padding: 5px;">4</td> <td style="padding: 5px;"> </td> <td style="padding: 5px;">20</td> </tr> <tr> <td style="padding: 5px;">6</td> <td style="padding: 5px;">6</td> <td style="padding: 5px;"> </td> <td style="padding: 5px;">36</td> </tr> <tr> <td style="padding: 5px;">10</td> <td style="padding: 5px;">3</td> <td style="padding: 5px;"> </td> <td style="padding: 5px;">30</td> </tr> </tbody> </table> <p style="margin-top: 20px;"><i>Total points</i> = $14 + 20 + 36 + 30 = 100$</p> <p><i>Frequency</i> = $7 + 4 + 6 + 3 = 20$</p> <p><i>Average points</i> = $\frac{\text{Sum}}{\text{Amount}} = \frac{100}{20} = 5$</p>	Points	Frequency	Tally	Total Points	2	7		14	5	4		20	6	6		36	10	3		30
Points	Frequency	Tally	Total Points																		
2	7		14																		
5	4		20																		
6	6		36																		
10	3		30																		

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 6

	Answer: 5 points
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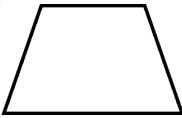
SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 7

1.	612088
2.	5007.09
3.	$8 = 10 - A$ $A = 10 - 8 = 2$
4.	5000
5.	$\frac{66}{100} = \frac{33}{50}$
6.	$\frac{35}{6}$
7.	$\frac{1}{5} = 15$ $\frac{5}{5} = 15 \times 5 = 75$
8.	$11 \frac{12}{12} - \frac{7}{12} = 11 \frac{5}{12}$
9.	$\frac{63.18}{9} = 7.02$
10.	\$97.40
11.	<i>Bag of sugar</i>
12.	$\frac{4500}{500} = 9$
13.	2:50
14.	<i>Phillip</i>
15.	North
16.	<i>Yes</i>
17.	3

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 7

18.	$4 + 10 = 14$
19.	1 (6 is <i>NOT</i> correct)
20.	$2 + 1 + 3 + 6 + 5 + 3 = 20$
21.	$Voted = 5600 - 1400 = 4200$ $Percentage\ voted = \frac{4200}{5600} \times \frac{100}{1} = 75\%$
22.	$7\frac{1}{2} \times A = 20$ $A = 20 \div 7\frac{1}{2} = 2\frac{2}{3}$
23.	$Shared = 1 - \frac{1}{4} = \frac{3}{4}$ $Each\ cousin = \frac{3}{4} \div 15 = \frac{3}{4} \times \frac{1}{15} = \frac{1}{20}$
24.	a) $\frac{1}{20} \times \frac{100}{1} = 5\%$ b) $Total\ blocks\ to\ shade = \frac{55}{5} = 11$ $Need\ to\ shade = 11 - 8 = 3$ Shade any 3 blocks.
25.	$Total\ oranges = 8$ $Groups\ of\ oranges = \frac{8}{2} = 4$ $Total\ mangoes = 4 \times 3 = 12$ $Total\ fruits = 12 + 8 = 20$
26.	$Discounted = \frac{25}{100} \times \frac{3500}{1} = \875 $Discounted\ price = \$3500 - \$875 = \$2625$ $VAT = \frac{15}{100} \times \frac{2625}{1} = \393.75 $Selling\ price = \$2625 + \$393.75 = \$3018.75$

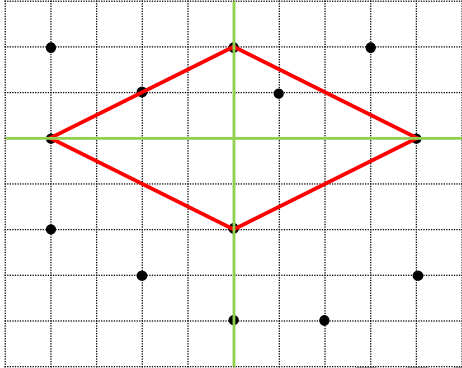
SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 7

27.	<p><i>Regular wage</i> = $8 \times \\$25.50 = \\204</p> <p><i>Overtime wage</i> = $4 \times \\$33.75 = \\135</p> <p><i>Total wage</i> = $\\$204 + \\$135 = \\$339$</p> <p><i>Saved</i> = $\frac{5}{6} \times \frac{339}{1} = \\282.50</p>
28.	<p><i>Green</i> = $(50 - 12) \div 2 = 38 \div 2 = 19 = \frac{19}{50} = \frac{38}{100} = 0.38$</p>
29.	<p>$4 \times 0.89 = 3.56m$</p> <p>$7 \times 1.06 = 7.42m$</p> <p><i>Total</i> = $3.56 + 7.42 = 10.98m$</p> <p><i>Remaining</i> = $20.00 - 10.98 = 9.02m$</p>
30.	<p><i>Arrived at work</i> = $7:28 + 0:53 = 7:81 = 8:21am$</p> <p><i>Work started</i> = $8:21 - 0:31 = 7:50am$</p> <p><i>Should leave home</i> = $7:50 - 0:53 = 6:57am$</p>
31.	<p><i>Area of 1 unit</i> = $S \times S = 1 \times 1 = 1cm^2$</p> <p><i>Number of units in enclosed shape</i> = 55.5</p> <p><i>Area</i> = $1 \times 55.5 = 55.5cm^2$</p>
32.	<p>$V = L \times B \times H = 85 \times 40 \times 30 = 102\,000cm^3$</p> <p>Total volume of containers $400ml + 600ml = 1000ml = 1000cm^3$</p> <p><i>Number of times</i> = $\frac{102\,000}{1000} = 102\,times$</p>
33.	 <p>Trapezium</p>
34.	<p>Any regular polygon on the grid with 8 sides (regular octagon).</p>

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 7

35.	<p><i>Sum spent in first 4 weeks</i> = $M \times A = 470 \times 4 = \\1880</p> <p><i>Sum spent in remaining 6 weeks</i> = $M \times A = 520 \times 6 = \\3120</p> <p><i>Total spent</i> = $1180 + 3120 = 5000$</p> <p><i>Mean</i> = $\frac{S}{A} = \frac{5000}{10} = \\500</p>
36.	<p><i>Sum</i> = $126 + 176 + 67 = 369$</p> <p><i>Mean</i> = $\frac{S}{A} = \frac{369}{3} = 123$</p> <p><i>Sum of 2 numbers</i> = $M \times A = 123 \times 2 = 246$</p> <p><i>Other number</i> = $246 - 100 = 146$</p>
37.	<p><i>Cost</i> = $100 - 12 = \\$88$</p> <p><i>Total plums</i> = $33 \times 12 = 396$</p> <p><i>Repackaged bags</i> = $\frac{396}{4} = 99$</p> <p><i>Sales = Cost + Profit</i> = $88 + 110 = \\$198$</p> <p><i>CP of each repackaged bag</i> = $\frac{198}{99} = \\$2$</p>
38.	<p>a) $V = L \times B \times H = 4 \times 3 \times 3 = 36$ cartons</p> <p><i>Cubes in box</i> = $1 \times 3 = 3$</p> <p style="padding-left: 40px;">$4 \times 2 = 8$</p> <p style="padding-left: 40px;">$3 \times 1 = 3$</p> <p style="padding-left: 40px;"><i>Total</i> = 14</p> <p><i>Cubes required to fill box</i> = $36 - 14 = 22$</p> <p><i>Cost</i> = $22 \times 15 = \\$330$</p>

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 7

	<p>b) $500g = \frac{1}{2}kg$</p> <p>$Weight = 36 \times \frac{1}{2} = 18kg$</p>
39.	
40.	<p>I do not agree with the decision to award Claudia. Although it is correct that she has the highest average number of houses sold, over the 5-year period the number of houses she sold continuously declined. The number of houses Anna sold, who's average is very close to the highest average, fluctuated throughout the 5-year period. However, Ben, who has the lowest average, has continuously increased his yearly sales and actually sold the most houses in year 5. While his average is the lowest of all three, I believe Ben deserves the award the most.</p>

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 8

1.	657 038						
2.	<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">Digit</th> <th style="padding: 5px;">Place Value</th> <th style="padding: 5px;">Value</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;">2</td> <td style="text-align: center; padding: 5px;">Tenths</td> <td style="text-align: center; padding: 5px;">$\frac{2}{10}$ or 0.2</td> </tr> </tbody> </table>	Digit	Place Value	Value	2	Tenths	$\frac{2}{10}$ or 0.2
Digit	Place Value	Value					
2	Tenths	$\frac{2}{10}$ or 0.2					
3.	$S = \sqrt{324}$ $\begin{array}{r} 2 324 \\ \underline{2 0} \\ 2 162 \\ \underline{2 40} \\ 3 81 \\ \underline{3 60} \\ 3 27 \\ \underline{3 6} \\ 3 9 \\ \underline{3 6} \\ 3 3 \\ \underline{3 3} \\ 1 1 \\ \underline{1 0} \end{array}$ $\therefore S = 2 \times 3 \times 3 = 18$						
4.	$\frac{2}{3} \times \frac{100}{1} = 66.66\% = 0.6666$ <p>Answer: 0.6666</p>						
5.	$\frac{11}{15} - \frac{1}{3}$ $\frac{(11 - 5)}{15} = \frac{6}{15} = \frac{2}{5}$ <p>Answer: $\frac{2}{5}$</p>						
6.	$3792 + 7328 = 11\,120$						
7.	72						
8.	96,292						
9.	230.37						
10.	2.75						
11.	$1.5 \times 60 = 90$ Answer: 90 minutes						

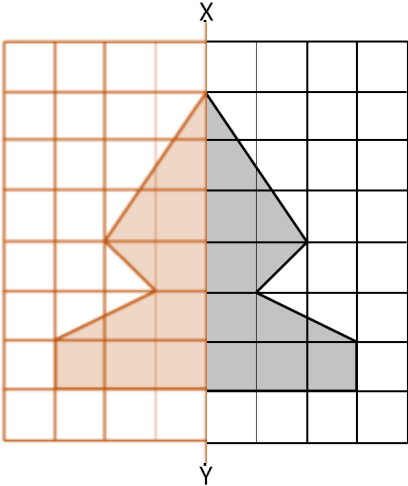
SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 8

12.	$2.68 \times 1000 = 2680$ Answer: 2680 metres												
13.	8:05												
14.	$P = S \times 4 = 24 \times 4 = 96$ Answer: 96 cm												
15.	Isosceles triangle												
16.	4												
17.	B												
18.	$Sum = 43 + 70 + 37 + 64 + 36 = 250$ $Mean = \frac{S}{A} = \frac{250}{5} = 50$ Answer: 50												
19.	10												
20.	<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;"></th> <th style="width: 20%;">Scores</th> <th style="width: 50%;">Tally</th> </tr> </thead> <tbody> <tr> <td>Bill</td> <td style="text-align: center;">5</td> <td style="text-align: center;"> </td> </tr> <tr> <td>Naim</td> <td style="text-align: center;">8</td> <td style="text-align: center;"> </td> </tr> <tr> <td>Richard</td> <td style="text-align: center;">7</td> <td style="text-align: center;"> </td> </tr> </tbody> </table>		Scores	Tally	Bill	5		Naim	8		Richard	7	
	Scores	Tally											
Bill	5												
Naim	8												
Richard	7												
21.	15 students = 75 pencils Remaining students = $35 - 15 = 20$ <i>Pencils for remaining students</i> = $20 \times 4 = 80$ <i>Total pencils</i> = $75 + 80 = 155$ Answer: 155 pencils												
22.	Jewel = 4 portions Aiden = 1 portion 4 portions = 175 $1 \text{ portion} = \frac{175}{5} = 35$ Jewel = 4 portions = $35 \times 4 = 140$ Answer: 140 seashells												

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 8

23.	$\text{Discount} = \frac{30}{100} \times \frac{3950}{1} = \1185 $\text{Selling price} = 3950 - 1185 = \2765 <p>Answer: \$2765</p>
24.	$9 \text{ men} = 8 \text{ days}$ $1 \text{ man} = 8 \times 9 = 72 \text{ days}$ $6 \text{ men} = \frac{72}{6} = 12 \text{ days}$ <p>Answer: 12 days</p>
25.	$\frac{1}{2}A = \frac{2}{5}S$ $\frac{2}{5}S = \frac{2}{5} \times \frac{115}{1} = 46$ $\frac{1}{2}A = 46$ $A = 46 \times 2 = 92$ $A + S = 92 + 115 = 207$ <p>Answer: 207</p>
26.	$\text{Stall 1: } 1 \text{ mango} = \frac{\$3.50}{2} = \$1.75. \text{ Stall 2: } 1 \text{ mango} = \frac{\$6.90}{3} = \$2.30$ <p>Mangoes are sold cheaper at Stall <u>1</u> at a cost of <u>\$1.75</u> per mango as opposed to Stall <u>2</u>.</p>
27.	$\text{Difference for 1L} = \$4.00 - \$2.50 = \1.50 $\text{Difference for 25L} = \37.50
28.	$\text{VAT} = \frac{1}{8} \times \frac{\$3200}{1} = \$400$ $\text{Subtotal} = \$3200 + \$400 = \$3600$ $\text{Discount} = \frac{15}{100} \times \frac{3600}{1} = \540 $\text{Selling price} = \$3600 - \$540 = \$3060$
29.	$1.35\text{kg} = 1350\text{g}$ $\text{Ball-bearings} = \frac{1350}{75} = 18$ <p>Answer: 18 ball-bearings</p>

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 8

30.	$P = \text{sum of all sides} = 5 + 5 + 6 + 6 + 6 + 5 + 5 + 16 = 54m$												
31.	$\text{Day 1} = 7:40a.m. \text{ to } 6:10p.m. = 10\frac{1}{2} \text{ hours}$ $\text{Day 2} = 10:30a.m. \text{ to } 5:00p.m. = 6\frac{1}{2} \text{ hours}$ $\text{Total} = 10\frac{1}{2} + 6\frac{1}{2} = 17 \text{ hours}$ Answer: 17 hours												
32.	$\text{Distance around garden} = S \times 4 = 10 \times 4 = 40m$ $\text{Roses} = \frac{40}{2} = 20$												
33.													
34.	Polygon	Name	Type										
	-	-	Regular										
	-	Trapezium	Irregular										
35.	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="padding: 5px;">Flavour</th> <th style="padding: 5px;">Frequency</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Coconut</td> <td style="padding: 5px;">6</td> </tr> <tr> <td style="padding: 5px;">Coffee</td> <td style="padding: 5px;">5</td> </tr> <tr> <td style="padding: 5px;">Chocolate</td> <td style="padding: 5px;">4</td> </tr> <tr> <td style="padding: 5px;">Vanilla</td> <td style="padding: 5px;">9</td> </tr> </tbody> </table>			Flavour	Frequency	Coconut	6	Coffee	5	Chocolate	4	Vanilla	9
Flavour	Frequency												
Coconut	6												
Coffee	5												
Chocolate	4												
Vanilla	9												

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 8

36.	The teacher can conclude that the student is improving because despite his performance was inconsistent in the first four tests, in the last five tests, his marks increased drastically as the number of questions he got incorrect decreased drastically.
37.	<p>a)</p> <p><i>Kept</i> = 25%</p> $\text{Remainder} = 100\% - 25\% = 75\% = \frac{75}{100} \times \frac{120}{1} = 90$ $\text{Gave} = \frac{2}{3} \times \frac{90}{1} = 60$ <p><i>Shared</i> = 90 - 60 = 30 notepads</p> $\text{Shared} = \frac{30}{120} = \frac{1}{4}$ <p>b)</p> <p><i>Removing unequal quantity</i> = 30 - 14 = 16</p> $\text{Sharing equally} = \frac{16}{2} = 8$ <p><i>Shianne</i> = 8 + 14 = 22</p>
38.	<p><i>Area of each triangle</i> = $\frac{10}{3} \times \frac{3}{1} = 10\text{cm}^2$</p> <p><i>Area of 6 triangles</i> = 10 × 6 = 60cm²</p> <p><i>Area of shaded triangle and 6 identical triangles</i> = $\frac{235}{2} = 117.5\text{cm}^2$</p> <p><i>Area of shaded region</i> = 117.5 - 60 = 57.5cm²</p>
39.	<p>a)</p> <p>b) 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10 + 11 = 66 dots</p>
40.	<p><i>Sum</i> = <i>M</i> × <i>A</i> = 4820 × 4 = 19,280</p> <p><i>Sum</i> = <i>M</i> × <i>A</i> = 7610 × 5 = 38,050</p> <p><i>Sum</i> = <i>M</i> × <i>A</i> = 5470 × 3 = 16,410</p>

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 8

$Total = 19,280 + 38,050 + 16,410 + 7860 = 81,600$ $Average\ monthly\ income = \frac{Sum}{Amount} = \frac{81,600}{12} = \$6,800$ Answer: \$6,800
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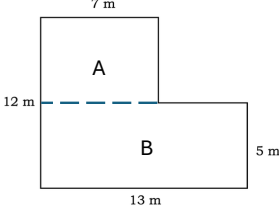
SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 9

1.	2448
2.	300
3.	$\frac{5}{8}$
4.	$\frac{4}{5} < \frac{21}{20}$
5.	$Y=1$
6.	$Change = 100 - 47.55 = \$52.45$ Answer: \$52.45
7.	$Pencils = 43 \times 36 = 1548$ Answer: 1548
8.	$\frac{55}{100} = \frac{11}{20}$ Answer: $\frac{11}{20}$
9.	52 cents or \$0.52
10.	5.6
11.	metres
12.	$0.98 \times 1000 = 980g$ Answer: 980 grams
13.	2:00
14.	$10:06 - 8:33 = 1:33$ 1 hour and 33 minutes
15.	Square
16.	Yes, it is symmetrical. (No mark for any numerical value)
17.	3
18.	$9+3+7=19$ Answer: 19
19.	$Mean = \frac{S}{A} = \frac{924}{14} = 66$ Answer: 66 runs

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 9

20.	$7+3+9=19$ Answer: 19 students
21.	30% $\frac{1}{3} = 33\frac{1}{3}\%$ $0.35 = 35\%$ Answer: $0.35, \frac{1}{3}, 30\%$
22.	$5 - 3\frac{3}{5} = 1\frac{2}{5}$ $X + 1\frac{2}{5} = 3\frac{3}{5}$ $X = 3\frac{3}{5} - 1\frac{2}{5} = 2\frac{1}{5}$ Answer: $2\frac{1}{5}$
23.	$8kg = \$98.40$ $1kg = \frac{98.40}{8}$ $9kg = \frac{98.40}{8} \times \frac{9}{1} = \110.70
24.	A remainder is obtained when an exact number of groups of the divisor cannot be obtained from the dividend. Therefore, when the dividend is not a multiple of the divisor, a remainder is obtained. In the case of $12 \div 5$, only 2 groups of 5 can be formed from 12 and there will be 2 units from 12 remaining. This is because 5 is not a factor of 12 and therefore a remainder is expected.
25.	Finding the cost of 1kg $Chin\ Lee\ Supermarket = 4 \times \$5.10 = \$20.40$ $Rawle\ Supermarket = 3 \times \$6.60 = \$19.80$ Answer: If Angie purchased from the more expensive supermarket then she purchased from Chin Lee Supermarket. From my calculations, 1kg of rice costs \$20.40 from Chin Lee Supermarket as opposed to \$19.80 from Rawle Supermarket. Thus, Chin Lee Supermarket is more expensive.

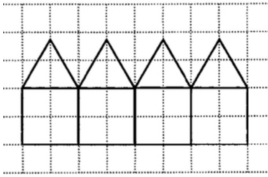
SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 9

26.	$SI = \frac{P \times R \times T}{100} = \frac{4500 \times 10 \times 5}{100} = \2250 $A = SI + P = \$2250 + \$4500 = \$6750$ $\text{Monthly Instalment} = \frac{6750}{5 \times 12} = \112.50
27.	$\text{Regular wage} = 40 \times \$25 = \$1000$ $\text{Overtime wage} = \$1412.50 - \$1000 = \$412.50$ $\text{Overtime rate} = 1.5 \times \$25 = \$37.50$ $\text{Overtime hours} = \frac{412.50}{37.50} = 11$
28.	$\text{Men and Women} = \frac{1}{4} + \frac{3}{8} = \frac{5}{8}$ $\text{Boys and girls} = 1 - \frac{5}{8} = \frac{3}{8}$ $\text{Girls} = \frac{3}{8} \div 2 = \frac{3}{8} \times \frac{1}{2} = \frac{3}{16}$ <p>Answer: $\frac{3}{16}$</p>
29.	$5m = 500cm$ $\text{Number of pieces} = \frac{500}{3.5} = \frac{5000}{35} = 142 \frac{80}{35}$ <p>Answer: 142 pieces</p>
30.	$5 \frac{1}{2} kg = 5500g$ $\text{Number of packets} = \frac{5500}{275} = 20$ <p>Answer: 20 packets</p>
31.	<div style="display: flex; align-items: center;"> <div style="flex: 1;">  </div> <div style="flex: 2;"> $\text{Area of A} = S \times S = 7 \times 7 = 49m^2$ $\text{Area of B} = L \times B = 13 \times 5 = 65m^2$ $\text{Total area} = 49m^2 + 65m^2 = 114m^2$ </div> </div>
32.	$P = (L + B) \times 2 = (70 + 35) \times 2 = 105 \times 2 = 210m$ $\text{Cost} = \frac{210}{2} \times \frac{20}{1} = \2100 <p>The cost to fence the field is \$2100 which is more than the budget of \$2000. Therefore, the budget will be insufficient.</p>

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 9

33.	<p>a) Answer: Right angle</p> <p>b) Answer: Less than a right angle</p>										
34.	<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">Properties</th> <th style="padding: 5px;">Name of solid</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Three faces</td> <td style="padding: 5px;">a) Cylinder</td> </tr> <tr> <td style="padding: 5px;">Six edges and four vertices</td> <td style="padding: 5px;">b) Triangular based pyramid</td> </tr> <tr> <td style="padding: 5px;">Six vertices</td> <td style="padding: 5px;">c) Triangular prism</td> </tr> </tbody> </table>	Properties	Name of solid	Three faces	a) Cylinder	Six edges and four vertices	b) Triangular based pyramid	Six vertices	c) Triangular prism		
Properties	Name of solid										
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35.	<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">Grade</th> <th style="padding: 5px;">A</th> <th style="padding: 5px;">B</th> <th style="padding: 5px;">C</th> <th style="padding: 5px;">D</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Frequency</td> <td style="padding: 5px;">10</td> <td style="padding: 5px;">12</td> <td style="padding: 5px;">11</td> <td style="padding: 5px;">9</td> </tr> </tbody> </table>	Grade	A	B	C	D	Frequency	10	12	11	9
Grade	A	B	C	D							
Frequency	10	12	11	9							
36.	<p><i>Sum of 5 numbers = $M \times A = 85 \times 5 = 425$</i></p> <p><i>Mean of 4 numbers = $85 - 7 = 78$</i></p> <p><i>Sum of 4 numbers = $M \times A = 78 \times 4 = 312$</i></p> <p><i>Removed number = $425 - 312 = 113$</i></p> <p>Answer: 113</p>										
37.	<p><i>If Vendor B sold 14 watermelons more than Vendor A, then Vendor A sold 14 less than Vendor B. Therefore, 14 must be added to the number of watermelons sold by Vendor B.</i></p> <p><i>If Vendor B sold 6 less than Vendor C, then Vendor C sold 6 more than Vendor B. Therefore, 6 must be added to the number of watermelons sold by Vendor B to calculate the number of watermelons sold by Vendor C.</i></p> <p><i>Vendor A = A</i></p> <p><i>Vendor B = A + 14</i></p> <p><i>Vendor C = B + 6 = A + 14 + 6</i></p>										

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 9

	$124 - 14 - 14 - 6 = 124 - 34 = 90$ $A = \frac{90}{3} = 30$ <p><i>Vendor A = 30</i></p> <p><i>Vendor B = 30 + 14 = 44</i></p> <p><i>Vendor C = 30 + 14 + 6 = 50</i></p> <p><i>Answer:</i></p> <p><i>Vendor A = 30</i></p> <p><i>Vendor B = 44</i></p> <p><i>Vendor C = 50</i></p>
38.	<p>a)</p> <p><i>Work begins = 7:50 + 10 = 8:00</i></p> <p><i>8:00 - 6:55 = 1:05 = 1 hour 5 minutes</i></p> <p>b)</p> <p><i>Workday including breaks = 8:00a.m. to 4:00p.m. = 8 hours</i></p> <p><i>Morning break = 10:00 a.m. to 10:20a.m. = 20 minutes</i></p> <p><i>Afternoon break = 2:30p.m. to 2:45p.m. = 15 minutes</i></p> <p><i>Lunch break = 12:00p.m. to 1:00p.m. = 60 minutes</i></p> <p><i>Total breaktime = 20+15 = 95 minutes</i></p> <p><i>Workday excluding breaks = 8 hours - 95minutes = 6 hours 25 minutes</i></p> <p><i>Answer: 6 hours and 25 minutes or $6\frac{5}{12}$</i></p> <p>c)</p> <p><i>Sleep = 11:45p.m. to 6:00a.m. = 6 hours and 15 minutes = $6\frac{1}{4}$ hours</i></p> <p><i>Answer: 6 hours and 15 minutes or $6\frac{1}{4}$ hours</i></p>
39.	<p>a)</p> 

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 9

	<p>b) From the pattern it can be seen that the number of squares with a triangle atop it is the same as the figure number. Therefore, the tenth figure will have 10 squares, each with a triangle atop it.</p>
40.	<p>a) I think it is more effective to represent the data using a block graphs as it is easier to look at and understand. The mode can also be easily identified. Block graphs also allow for easier interpretations than frequency tables, as proportions and patterns between categories are easier to identify.</p> <p>b) I think beach C should be beautified first. The least number of tourists visited beach C (205) compared to the other beaches. Therefore, if the beach is beautified tourists may want to visit as they may be more attracted as a result of making the beach and its surroundings seem more inviting. (FREE RESPONSE)</p>

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SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 10

1.	468
2.	$(1 \times 100) + (4 \times 10) + (9 \times 1) + \left(3 \times \frac{1}{10}\right) + \left(7 \times \frac{1}{100}\right)$ OR $(1 \times 100) + (4 \times 10) + (9 \times 1) + (3 \times 0.1) + (7 \times 0.01)$
3.	$X = \sqrt{121} = 11$
4.	$\frac{378}{9} = 42$
5.	$\frac{67}{9}$
6.	$\frac{1}{13} = 289$ $\frac{13}{13} = 289 \times 13 = 3757$ Answer: \$3757
7.	383.0
8.	0.625
9.	$Total = 4 + 8 + 6 = 18$ $Green = \frac{8}{18} = \frac{4}{9}$ Answer: $\frac{4}{9}$
10.	$\frac{85}{100} \times \frac{1500}{1} = 1275$ Answer: 1275
11.	Square metres/ m^2
12.	29,000 m
13.	$11:48 + 0:35 = 11:83 = 12:23 p.m.$
14.	$\frac{200^{3\frac{2}{6}}}{60_1} = 3\frac{1}{3}$ Answer: $3\frac{1}{3}$
15.	There is one pair of parallel sides
16.	Isosceles triangle

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 10

17.	Triangular prism
18.	$Amount = Mean \times Sum = 43 \times 688 = 29,584$
19.	6
20.	$42 + 3 + 5 + 4 + 8 + 6 = 28$
21.	$15 - G = 6 + \frac{5}{8}$ $15 - G = 6\frac{5}{8}$ $G = 15 - 6\frac{5}{8}$ $G = 14\frac{8}{8} - 6\frac{5}{8} = 8\frac{3}{8}$ <p>Answer: $8\frac{3}{8}$</p>
22.	Prime numbers between 10 and 20: 11, 13, 17, 19 $Sum = 11 + 13 + 17 + 19 = 60$
23.	$Not\ burnt = 90 - 12 = 78$ $= \frac{78}{90} \times \frac{100}{1} = \frac{780}{9} = 86\frac{2}{3}\%$ Answer: $86\frac{2}{3}\%$
24.	$75\ oranges = \$120$ $1\ orange = \frac{120}{75}$ $120\ oranges = \frac{120^8}{75_{81}} \times \frac{120^{24}}{1} = \192 Answer: \$192
25.	$3\ hours = 3 \times 60 = 180\ minutes$ $Cost\ of\ call = 180 \times \$0.40 = \$72$ $Balance = 1000 - 72 = \$928$
26.	$Girls = 0.375 = \frac{3}{8}$ $Boys = 1 - \frac{3}{8} = \frac{5}{8} = \frac{5}{8} \times \frac{360}{1} = 225$

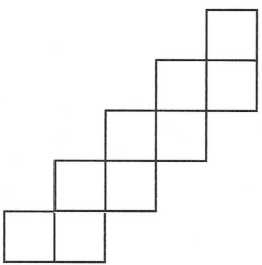
SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 10

	$\text{Boys with distinction} = 0.2 = \frac{1}{5}$ $\text{Boys without distinction} = 1 - \frac{1}{5} = \frac{4}{5} \times \frac{225}{1} = 180$ <p>Answer: 180 boys</p>
27.	$\text{Stationery} = \frac{1}{5} \times \frac{1000}{1} = 200$ $\text{Remained} = 1000 - 200 = 800$ $\text{Gift} = \frac{3}{8} \times \frac{800}{1} = \300 $\text{Spent} = 200 + 300 = 500$ $\text{Remained} = 1000 - 500 = 500 = \frac{500}{1000} = \frac{1}{2} = 0.5$ <p>Answer: 0.5</p>
28.	$\text{Renesh} = 12\frac{3}{8} + 4\frac{1}{4}$ $12 + 4 = 16$ $\frac{3}{8} + \frac{1}{4}$ $\frac{3 + 2}{8} = \frac{5}{8}$ $16\frac{5}{8}$ $\text{Altogether} = 16\frac{5}{8} + 12\frac{3}{8}$ $= 28 + \frac{8}{8} = 29$ <p>Answer: 29</p>
29.	$33\frac{1}{3}\% \text{ Capacity} = L \times B \times H = 50 \times 40 \times 15 = 30\,000\text{cm}^3$ $\text{Full capacity} = 30\,000\text{cm}^3 \times 3 = 90\,000\text{cm}^3$ $1000\text{cm}^3 = 1\text{L}$ $90000\text{cm}^3 = \frac{90000}{1000} = 90\text{L}$
30.	$2 \text{ weeks and } 4 \text{ days} = 14 + 4 \text{ days} = 18 \text{ days}$

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 10

	$\therefore \text{date} = 10\text{th} + 18 \text{ days} = 28\text{th June}, 2021$									
31.	<p>$\text{Chips in box} = 1450\text{g} - 250\text{g} = 1200\text{g}$</p> <p>$\text{Each pack of chips} = \frac{1200}{24} = 50\text{g}$</p> <p>Answer: 50 grams</p>									
32.	<p>$\text{Length} = 7 \times 4 = 28 \text{ cm}$</p> <p>$\text{Width} = 7 \text{ cm}$</p> <p>$\text{Area} = L \times W = 28 \times 7 = 196 \text{ cm}^2$</p> <p>Answer: 196 cm^2</p>									
33.										
34.	The pattern is repeating since the first and second terms are being repeated (the third and fourth terms are the same as the first and second terms).									
35.	<table border="1" style="margin: auto;"> <thead> <tr> <th></th> <th>Points</th> <th>Tally</th> </tr> </thead> <tbody> <tr> <td>Taxi</td> <td>10</td> <td> </td> </tr> <tr> <td>Non-Taxi</td> <td>14</td> <td> </td> </tr> </tbody> </table>		Points	Tally	Taxi	10		Non-Taxi	14	
	Points	Tally								
Taxi	10									
Non-Taxi	14									
36.	<p>Sum of scores</p> <p>$4 \text{ matches} = M \times A = 85 \times 4 = 340$</p> <p>$3 \text{ matches} = 73 + 88 + 90 = 251$</p>									

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 10

	<p>$Missing\ score = 340 - 251 = 89$</p> <p>Answer: 89</p>												
37.	<p>$Cost\ price = \\$450 - \\$12 = \\$438$</p> <p>$Plums = 33 \times 12 = 396$</p> <p>$Repackaged\ bags = \frac{396}{4} = 99$</p> <p>$Selling\ price = \\$438 + \\$255 = \\693</p> <p>$Selling\ price\ of\ each\ bag = 693 \div 99 = \\7</p> <p>Answer: \$7.00</p>												
38.	<p>Time spent working</p> <p>$4:30 + 0:40 + 0:40 + 0:30 = 4:140 = 6:20 = 6\ hours\ and\ 20\ minutes$</p> <p>Time remaining</p> <p>$6\ hours\ and\ 20\ minutes\ to\ 8\ hours = 1\ hour\ and\ 40\ minutes$</p> <p>$= 1\frac{40}{60} = 1\frac{2}{3}\ hours$</p>												
39.	<p>a)</p> <div style="display: flex; align-items: center; justify-content: center;">  <div style="margin-left: 20px;"> <p>b) The pattern is formed by adding two squares , stacked atop each other, to the previous term. The two squares are aligned where the bottom square is adjacent to the right of the top square of the previous term.</p> </div> </div>												
40.	<p>a)</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 5px;">Month</th> <th style="padding: 5px;">Amount of rainfall (mm)</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Jan</td> <td style="padding: 5px;">90</td> </tr> <tr> <td style="padding: 5px;">Feb</td> <td style="padding: 5px; color: red;">40</td> </tr> <tr> <td style="padding: 5px;">Mar</td> <td style="padding: 5px; color: red;">50</td> </tr> <tr> <td style="padding: 5px;">Apr</td> <td style="padding: 5px; color: red;">50</td> </tr> <tr> <td style="padding: 5px;">Jun</td> <td style="padding: 5px; color: red;">180</td> </tr> </tbody> </table> <p>b)</p> <p>$May's\ rainfall = 540 - (90 + 40 + 50 + 50 + 180) = 540 - 410 = 130mm$</p>	Month	Amount of rainfall (mm)	Jan	90	Feb	40	Mar	50	Apr	50	Jun	180
Month	Amount of rainfall (mm)												
Jan	90												
Feb	40												
Mar	50												
Apr	50												
Jun	180												

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 11

1.	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>Hundreds of Thousands</th> <th>Tens of Thousands</th> <th>Thousands</th> <th>Hundreds</th> <th>Tens</th> <th>Ones</th> </tr> </thead> <tbody> <tr> <td>5</td> <td>0</td> <td>4</td> <td>0</td> <td>8</td> <td>7</td> </tr> </tbody> </table>	Hundreds of Thousands	Tens of Thousands	Thousands	Hundreds	Tens	Ones	5	0	4	0	8	7
Hundreds of Thousands	Tens of Thousands	Thousands	Hundreds	Tens	Ones								
5	0	4	0	8	7								
2.	4007.09												
3.	$8 + 25 = 100 - A$ $33 = 100 - A$ $A = 100 - 33 = 67$ Answer: 67												
4.	6000												
5.	$0.875 = \frac{7}{8}$												
6.	$\frac{44}{9}$												
7.	$Spent = \frac{4}{5}$ $Remainder = 1 - \frac{4}{5} = \frac{1}{5} = 17.20$ $\frac{5}{5} = 17.20 \times 5 = \86 Answer: \$86												
8.	$6 - \frac{7}{12} = 5\frac{12}{12} - \frac{7}{12} = 5\frac{5}{12}$ Answer: $5\frac{5}{12}$												
9.	$\frac{60.18}{3} = 20.06$ Answer: 20.06												
10.	Change = \$100 - \$97 = \$3												
11.	$2.3kg = 2300g > 2258g$ Answer: sugar												
12.	$\frac{450^9}{50_1} = 9$ Hurdles in a non-enclosed are = $9 + 1 = 10$ Answer: 10 hurdles												

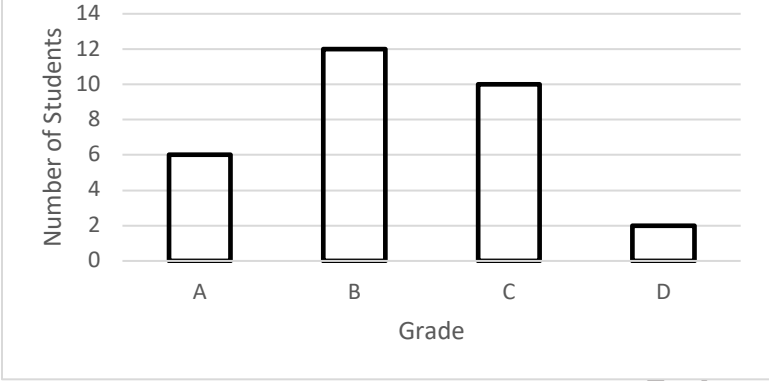
SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 11

13.	$2:50 + 0:25 = 3:15$									
14.	Liam									
15.	South									
16.	Triangular based pyramid									
17.	No, it is not.									
18.	$7 + 10 = 17$ Answer: 17									
19.	3 goals									
20.	$8 - 5 = 3$ Answer: 3 hours									
21.	$Total\ chocolates = (20 \times 10) + 50 = 200 + 50 = 250$ $Remaining = \frac{50}{250} \times \frac{100}{1} = 20\%$									
22.	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Flour</th> <th>Butter</th> <th>Together</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">1</td> <td style="text-align: center;">4</td> </tr> <tr> <td style="text-align: center;">$3 \times 6 = 18$</td> <td style="text-align: center;">$1 \times 6 = 6$</td> <td style="text-align: center;">$4 \times 6 = 24$</td> </tr> </tbody> </table> <p>Answer: 6</p>	Flour	Butter	Together	3	1	4	$3 \times 6 = 18$	$1 \times 6 = 6$	$4 \times 6 = 24$
Flour	Butter	Together								
3	1	4								
$3 \times 6 = 18$	$1 \times 6 = 6$	$4 \times 6 = 24$								
23.	$Litres\ of\ gasoline\ purchased = \frac{200}{4} = 50L$ $Distance = 50L \times 12 = 600km$									
24.	$Total = \$14 + \$16 + \$8 = \38 $Change = \$50 - \$38 = \$12$ Answer: \$12									
25.	$Adults = 1 - \frac{2}{5} = \frac{3}{5} = \frac{3}{5} \times \frac{800}{1} = 480$ $Male\ adults = \frac{60}{100} \times \frac{480}{1} = 288$									
26.	Calculating the cost for one eraser: $Deal\ 1 = \frac{6}{10} = \frac{3}{5} = \0.60 $Deal\ 2 = \frac{4.06}{7} = \0.58									

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 11

	<p>Answer: Deal 2 is the better deal because one will pay 2 cents less for each eraser from deal 2 as opposed to deal 1 which sells erasers for 60 cents.</p>
27.	$1n = 2p$ $5n + 3p = \$47.19$ $5n = 2p \times 5 = 10p$ <i>So $5n + 3p = 47.19$ becomes $10p + 3p = \\$47.19$</i> $13p = 47.19$ $1p = \frac{47.19}{13} = \3.63 $1n = \$3.63 \times 2 = \7.26 Answer: \$7.26
28.	$Cost\ to\ produce\ 20\ bottles = 20 \times \$2.50 = \$50$ $SP = 14 \times \$4 = \56 $Profit = \$56 - \$50 = \$6$
29.	$Lunch\ break = 9:00 + 1:15 + 0:40 = 10:55am$
30.	$1km = 2cm$ $1500cm = 1.5km = 1.5 \times 2 = 3cm$
31.	$Fruits = 3\ squares \times 12 = 36\ squares$ <i>For a square of 36 units, each side must be 6 units.</i> Answer: A square of side 6 units
32.	$Total\ cubes = L \times B \times H = 6 \times 4 \times 3 = 72\ CUBES$ $Volume = 72 \times 5cm^3 = 360cm^3$ Answer: $360cm^3$
33.	Angle A: Smaller than a right angle Angle B: Right angle
34.	Each term has one side less than the previous term.
35.	$Each\ symbol = \frac{28}{14} = 2\ students$ $Composition = 5 \times 2 = 10$ Answer: 10 students

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 11

36.	<div style="text-align: center;"> <p>Chart showing the Grades of Students in a Test</p>  <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <caption>Data from Chart</caption> <thead> <tr> <th>Grade</th> <th>Number of Students</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>6</td> </tr> <tr> <td>B</td> <td>12</td> </tr> <tr> <td>C</td> <td>10</td> </tr> <tr> <td>D</td> <td>2</td> </tr> </tbody> </table> </div>	Grade	Number of Students	A	6	B	12	C	10	D	2
Grade	Number of Students										
A	6										
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C	10										
D	2										
37.	$\text{Spent} + \text{Invested} = \frac{3}{8} + \frac{3}{8} = \frac{6}{8} = \frac{3}{4}$ $\text{Saved} = 1 - \frac{3}{4} = \frac{1}{4} = 500$ $\text{Total Salary} \frac{4}{5} = 500 \times 4 = 2000$ $\text{Total Spent} = \frac{3}{8} \times \frac{2000}{1} = 750$ $\text{Spent on Textbooks} = 33\frac{1}{3}\% = \frac{1}{3} \times \frac{750}{1} = 250$ $\text{Spent on Tuition} = 750 - 250 = 500$ $\text{Spent on Investing} = \frac{3}{8} \times \frac{2000}{1} = 750$ $\text{School Tuition and Investing} = 500 + 750 = \1250 <p>Answer: \$1250</p>										
38.	$\text{Weight for size S: } 4 \times 0.21\text{kg} = 0.84\text{kg} = 840\text{g}$ $M: 4 \times 215\text{g} = 860\text{g}$ $L: 4 \times 225\text{g} = 900\text{g}$ $\text{Total weight of items and box} = 840\text{g} + 860\text{g} + 900\text{g} + 280\text{g} = 2880\text{g}$ $\text{Cost for weight} = \frac{2880}{50} \times \frac{20}{1} = \1152 $\text{Total Cost} = \$1595 + \$1152 = \$2747$ <p>Answer: \$2747</p>										

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 11

39. a) In the above pattern which comprises of squares, triangles and circles, the pattern is formed by placing a square, followed by a triangle and then a circle. This is then repeated to form the rest of the pattern.
- b) This is a repeating pattern where the square, triangle and circle are constantly repeated in that order.
- c)

Square	Triangle	Circle
1	2	
4		
7		
10		
13		

The thirteenth term will be a square.

40. $June\ 10 - 19 = 45 + 26 = 71\ pancakes$
 $Sales\ for\ June\ 10 - 19 = 71 \times 8 = \568
 $Total\ sales\ for\ June = \$568 + \$392 = \960
 $Number\ of\ days = 15$
 $Average\ amount\ of\ money\ received\ each\ day = \frac{S}{A} = \frac{960}{15} = 64$
Answer: \$64

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 12

1.	0.6 OR $\frac{6}{10}$
2.	$\frac{1353}{11} = 123$ Answer: 123
3.	$9^2 = 81$ $\sqrt{100} = 10$ $81 + 10 = 91$ Answer: 91
4.	$\frac{25^1}{100_4} \times \frac{160^{40}}{1} = 40$ Answer: 40
5.	$\frac{46}{7}$
6.	$\frac{1}{5} + \frac{7}{10}$ $\frac{2 + 7}{10} = \frac{9}{10}$ Answer: $\frac{9}{10}$
7.	0.42, 0.73, 0.79, 0.83
8.	$\frac{25}{100} \times \frac{100}{1} = 20\%$ Answer: 20%
9.	$3 - 0 = 3$ $\frac{8 - 2}{9 - 9} = \frac{6}{9} = \frac{2}{3}$ $3\frac{2}{3}$
10.	$Total = 15 + 10 + 5 = 30$ $Chocolate\ chip\ muffins = \frac{10}{30} \times \frac{100}{1}$ Answer: $33\frac{1}{3}\%$
11.	Cube: 1.5kg

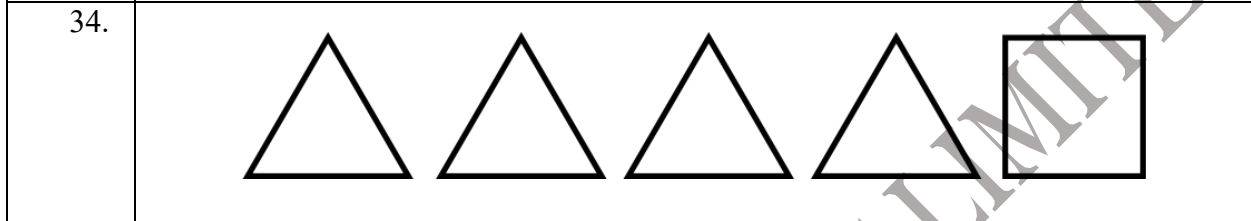
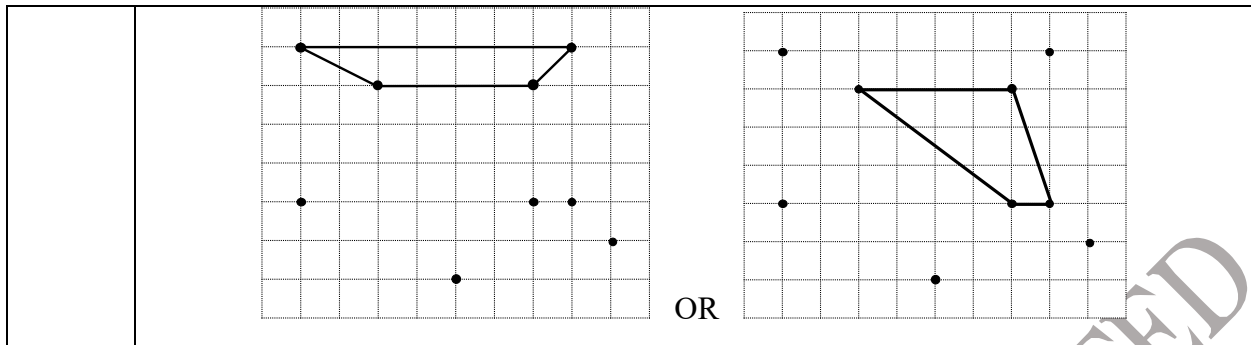
SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 12

	Cuboid: 1050g $1500g > 1050g$ Answer: Cube										
12.	4.05 litres										
13.	8:27										
14.	cm^2										
15.	Square-based pyramid										
16.	Right-angle										
17.	Yes, the shape is symmetrical										
18.	$Sum = Mean \times Amount = 7267$										
19.	Chocolate										
20.	$\frac{420}{14} = 30$ Answer: 30 trees										
21.	$\frac{1}{3} sum = 23.5$ $\frac{3}{3} = 23.5 \times 3 = 70.5$ $29.7 + A = 70.5$ $A = 70.5 - 29.7 = 40.8$ Answer: 40.8										
22.	$175 boxes = 175 \times 8 = 1400 eggs$ $Eggs needed = 1550 - 1400 = 150$ Answer: 150 eggs										
23.	$\sqrt{121}$ $\sqrt{100}$ $\sqrt{81}$ $\sqrt{64}$ $\sqrt{49}$										
24.	<table style="margin-left: 20px;"> <tr> <td>$2 \times \\$20$</td> <td>\$40</td> </tr> <tr> <td>$1 \times \\$10$</td> <td>\$10</td> </tr> <tr> <td>$5 \times \\$5$</td> <td>\$25</td> </tr> <tr> <td>$7 \times \\$1$</td> <td>\$7</td> </tr> <tr> <td>Total</td> <td>\$82</td> </tr> </table> <p>$Needed = \\$89.75 - \\$82.00 = \\$7.50$</p>	$2 \times \$20$	\$40	$1 \times \$10$	\$10	$5 \times \$5$	\$25	$7 \times \$1$	\$7	Total	\$82
$2 \times \$20$	\$40										
$1 \times \$10$	\$10										
$5 \times \$5$	\$25										
$7 \times \$1$	\$7										
Total	\$82										
25.	$Money he has = (2 \times 20) + (1 \times 10) + (5 \times 5) + (7 \times 1)$										

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 12

	$= 40 + 10 + 25 + 7 = \$82$ <i>Money needed</i> = $89.75 - 82 = \$7.75$ Answer: \$7.75
26.	$36 \text{ months} = \frac{36}{12} = 3 \text{ years}$ $SI = \frac{P \times R \times T}{100} = \frac{9000 \times 5 \times 3}{100} = \1350
27.	Answer: $A = 14 - 5 = 9$ $B = 15 + 5 = 20$ $C = 20 - 3 = 17$
28.	$Regular \text{ wage} = 40 \times \$22 = \$880$ $Overtime \text{ rate} = 1.5 \times \$22 = \$33$ $Overtime \text{ hours} = 53 - 40 = 13$ $Overtime \text{ wage} = 13 \times \$33 = \$429$ $Total \text{ wage} = \$880 + \$429 = \$1309$
29.	$11:30\text{p.m. to } 5:30\text{a.m.} = 6 \text{ hours}$ $5:30\text{a.m. to } 5:35\text{a.m.} = 5 \text{ minutes}$ Answer: 6 hours 5 minutes
30.	$Truck \text{ load added} = 750 + 750 = 1500\text{kg}$ $Final \text{ truck load} = 1500 - 450 = 1050\text{kg}$ The truck is above its weight capacity as its final capacity is 1050kg which is 50kg more than the weight capacity of 1000kg.
31.	$Side \text{ of square} = \sqrt{25} = 5\text{cm}$ OR $Volume = L \times B \times H = 12 \times 5 \times 5 = 300\text{cm}^2$ $V = A \times L = 25 \times 12 = 300\text{cm}^2$
32.	$Area \text{ of inside} = L \times B = 12 \times 4 = 48\text{cm}^2$ $Area \text{ of outside} = L \times B = 15 \times 13 = 195\text{cm}^2$ $Area \text{ of shaded} = 195 - 48 = 147\text{cm}^2$
33.	

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 12



35.

	Fishes	Tally
Zayn	7	
Kody	6	

36. $Sum\ of\ Karlene's\ marks = Mean \times Amount = 7 \times 84 = 588$
 $Sum\ of\ Arti's\ marks = Mean \times Amount = 7 \times 90 = 630$
 $Difference = 630 - 588 = 42$
 Answer: 42

37. The difference between the purchase was that Samaya bought 2 drinks more than Shriya. Therefore, the difference between their total bill will be the cost of 2 drinks.
 $2\ drinks = \$72.45 - \$63.45 = \$9.00$
 $1\ drink = \$9 \div 2 = \4.50
 Using Shriya's Bill:
 $3\ drinks + 5\ cookies = \63.45
 $3\ drinks = \$4.50 \times 3 = \13.50
 $\therefore \$13.50 + 5\ cookies = \63.45
 $5\ cookies = \$63.45 - \$13.50 = \$49.95$
 $1\ cookies = \frac{49.95}{5} = \9.99

SEA PRACTICE TEST: VOLUME III
MATHEMATICS TEST 12

	Answer: \$9.99 per cookies \$4.50 per soft drink
38.	<p><i>Blocks of gold needed to fill box = $L \times B \times H$</i></p> <p>$= 7 \times 6 \times 4 = 168$</p> <p><i>Volume of gold in filled box = $168 \times 9 = 1512 \text{ cm}^2$</i></p> <p><i>Cost to fill box = $1512 \times 6 = \\$9072$</i></p> <p>Answer: \$9072</p>
39.	<p>a) The pattern rule is adding one square after each cube to the number of squares in the previous term.</p> <p>OR: The pattern rule is a cube followed by squares which are equivalent to the term. For example, the fourth term will be a cube followed by four squares.</p> <p>b) 16th position</p> <p>c) 15th position</p>
40.	<p>a) Test B and Test F</p> <p>b) Test E</p> <p>c) The main conclusion that can be seen is the girls consistently scored less than the boys in each test. Therefore, it can be concluded that the girls are consistently underperforming compared to the boys.</p>

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