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Revision Tests for SEA Mathematics

TEACHER'S EDITION

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BRENT BISSOON

Preface

This book is written with the student in mind. There are 34 revision tests in this book which all examine a different topic . Each test examines the various skills processes, namely knowing, applying and reasoning, within the four strands of the Mathematics syllabus for level 4 and level 5 students, as outlined by the Ministry of Education.

Each test has been tailored to accurately evaluate the student's competence to reason and think critically as they all provide newer questions to test various aspects of the three processes. Questions require students to not just remember and recall information but also to engage in logical and systematic thinking and include intuitive and inductive reasoning, based on purely mathematical or real-life type questions. Questions may also involve making logical deductions based on specific assumptions and rules, and justifying results.

It is hoped that this book will significantly contribute to the readiness of the students who use it to prepare for the S.E.A. Examination.

Using this book

This Teacher's Edition book is designed to demonstrate to students how the topics taught can be applied to questions that involve different levels of reasoning and critical thinking. Solutions to each question are illustrated to remind students of the mathematical concepts taught.

Model answers are laid out in a logical and systematic order and gears towards helping the student understand how the information provided can be used to derive the answer required without regurgitating a specific method or procedure.

Brent Bissoon

Table of Contents

Revision Test 1

Topic covered: Number Representation **Time: 30 minutes**

Maximum Mark: 85 **Your Mark: _____**

1. a)

Answer Six hundred and seventeen thousand, three hundred and ninety-two. **(1 mark)**

b)

Answer Three hundred and seven thousand and sixty-six. **(1 mark)**

c)

Answer One million, three thousand, three hundred and thirty-three. **(1 mark)**

d)

Answer Four hundred and seventy-eight thousand, two hundred and ninety-eight. **(1 mark)**

e)

Answer Five hundred and eight thousand, three hundred and eighty-eight. **(1 mark)**

f)

Answer Thirty-eight thousand, two hundred and seventy-four. **(1 mark)**

g)

	Answer Nine hundred and twenty-seven thousand, five hundred and thirty-nine.	**(1 mark)**
	h) Answer Sixty-two thousand and eighty-four.	**(1 mark)**
	i) Answer Three hundred and twenty-six thousand, four hundred and twenty-eight.	**(1 mark)**
	j) Answer Seven thousand and forty-eight.	**(1 mark)**
2.	a) Answer 1 000 011	**(1 mark)**
	b) Answer 704 000	**(1 mark)**
	c) Answer 58 012	**(1 mark)**
	d) Answer 1 324 460	**(1 mark)**
	e)	

Answer 703 580 **(1 mark)**

f)

Answer 80 418 **(1 mark)**

g)

Answer 927 035 **(1 mark)**

3.

Numeral	Place Value	Value
	Hundred	600
	Million	1 000 000
	Tens	90
	Ones	3
	Thousand	1 000
	Hundreds of thousand	400 000
	Tens of thousand	40 000
	Hundredths	$\frac{7}{100}$ *or* 0.07
	Tenths	$\frac{6}{10}$ *or* 0.6
	Tens of thousand	70 000
	Million	1 000 000

	Tens	0
	Hundredths	$\frac{8}{100} or\ 0.08$
	Tenths	$\frac{0}{10} or\ 0.0$

(28marks)

4. a)

Answer $(9 \times 1\,000\,000) + (6 \times 100\,000) + (5 \times 10\,000) + (4 \times 1\,000) + (3 \times 100) + (2 \times 10) + (1 \times 1)$

(1 mark)

b)

Answer $(4 \times 100\,000) + (3 \times 10\,000) + (0 \times 1\,000) + (0 \times 100) + (8 \times 10) + (7 \times 1)$

(1 mark)

c)

Answer $(7 \times 1\,000\,000) + (0 \times 100\,000) + (3 \times 10\,000) + (0 \times 1\,000) + (1 \times 100) + (0 \times 10) + (3 \times 1) + \left(0 \times \frac{1}{10}\right) + (9 \times \frac{1}{100})$

(1 mark)

d)

Answer $(4 \times 100) + (3 \times 10) + (6 \times 1) + \left(7 \times \frac{1}{10}\right) + (8 \times \frac{1}{100})$

(1 mark)

e)

Answer $(6 \times 100\,000) + (1 \times 10\,000) + (3 \times 1\,000) + (9 \times 100) + (7 \times 10) + (2 \times 1) + \left(9 \times \frac{1}{10}\right) + (8 \times \frac{1}{100})$

(1 mark)

5. a)

Answer 8097 **(1 mark)**

b)

Answer 5 006 000 **(1 mark)**

c)

Answer 804 030 **(1 mark)**

d)

Answer 50 380 **(1 mark)**

e)

Answer 850 611 **(1 mark)**

6.

Numeral	Approximate to the		
	Nearest 10	Nearest 100	Nearest 1000
	30		
	70		
	110	100	
	670	700	
	400	400	

	780	800	
	550	500	
	5970	6000	6000
	7430	7400	7000
	5680	5700	6000
	8750	8800	9000
	3470	3500	3000
	3510	3500	4000

(30marks)

7.

a)

Numeral: 648

Word Name: Six hundred and forty-eight.

Expanded Notation: $(6 \times 100) + (4 \times 10) + (8 \times 1)$

b)

Numeral: 464

Word Name: Four hundred and sixty-four.

Expanded Notation: $(4 \times 100) + (6 \times 10) + (4 \times 1)$

c)

Numeral: 557

Word Name: Five hundred and fifty-seven.

Expanded Notation: $(5 \times 100) + (5 \times 10) + (7 \times 1)$

d)

Numeral: 431232

Word Name: Four hundred and thirty-one thousand, two hundred and thirty-two.

Expanded Notation: $(4 \times 100000) + (3 \times 10000) + (1 \times 1000) +$
$(2 \times 100) + (3 \times 10) + (2 \times 1)$

e)

Numeral: 543024

Word Name: Five hundred and forty-three thousand and twenty-four.

Expanded Notation: $(5 \times 100000) + (4 \times 10000) + (3 \times 1000) +$
$(0 \times 100) + (2 \times 10) + (4 \times 1)$

f)

Numeral: 543443

Word Name: Five hundred and forty-three thousand, four hundred and forty-three

Expanded Notation: $(5 \times 100000) + (4 \times 10000) + (3 \times 1000) +$
$(4 \times 100) + (4 \times 10) + (3 \times 1)$

(18marks)

Revision Test 2

Topic covered: Addition **Time: 12 minutes**

Maximum Mark: 16 **Your Mark: _____**

1. 384	2. 4304
3. 9445	4. 2884
5. 10 721	6. 1 358
7. 17 448	8. 9990

(8 marks)

9. Answer 11 120	**(1 mark)**
10. Answer 225	**(2 marks)**
11. Answer 8800	**(1 mark)**
12. Answer 231 a) Answer 398	**(1 mark)** **(1 mark)**
13. a) Answer 678 b) Answer 1096	 **(1 mark)** **(1 mark)**

Revision Test 3

Topic covered: Subtraction **Time: 12 minutes**

Maximum Mark: 14 **Your Mark: _____**

1. 4953	2. 52
3. 874	4. 124
5. 1595	6. 2698
7. 784001	8. 685564

(8 marks)

9. Answer 3077 students	**(1 mark)**
10. Answer 625	**(1 mark)**
11. a) Answer 789	**(1 mark)**
b) Answer 431	**(1 mark)**
12. Answer 831	**(1 mark)**
13. Answer 142	**(1 mark)**

Revision Test 4

Topic covered: Multiplication **Time: 15 minutes**

Maximum Mark: 13 **Your Mark: _____**

1. 1323	2. 37539
3. 7728	4. 1 000 000
5. 45024	6. 394831

(6 marks)

7. Answer $864\ hours$	**(2 marks)**
8. Answer 14 393	**(1 mark)**
9. Answer 348	**(1 mark)**
10. Answer 625	**(1 mark)**
11. Answer 3840	**(1 mark)**
12. Answer 720	**(1 mark)**

Revision Test 5

Topic covered: Division **Time: 12 minutes**

Maximum Mark: 14 **Your Mark: _____**

1. 142	2. 369
3. 95 R2	4. 68 R4
5. 95	6. 6292 R7

(6 marks)

7. Answer 132	**(1 mark)**
8. Answer 25	**(1 mark)**
9. Answer 60	**(1 mark)**
10. Answer 25	**(1 mark)**
11. Answer 4	**(2 mark)**
a) Answer In the case where 100 is being divided by 12, the dividend is 100 while the divisor is 12. Whenever the divisor is not a factor of the dividend a remainder is expected. A remainder is obtained because an exact number of groups of the divisor cannot be formed from the dividend which results in remaining units. In the case of $100 \div 12$, only 8 groups of 12 can be obtained and there are 4 remaining. This remainder is 4 out of 12 in the group which is equivalent to $\frac{1}{3}$ or 0.33.	**(2 marks)**

Revision Test 6

Topic covered: Number Sentences **Time: 20 minutes**

Maximum Mark: 24 **Your Mark: _____**

1. $X = 185$	2. $X = 4551$
3. $Y = 3707$	4. $Y = 1063$
5. $V = 11001$	6. $V = 8090$

7. $A = 589$	8. $A = 1556$
9. $P = 1395$	10. $P = 2008$
11. $Q = 1100$	12. $Q = 8799$

13. $H = 27$	14. $H = 43$
15. $T = 60$	16. $T = 63$
17. $K = 34$	18. $K = 88$

19. $G = 6$	20. $G = 12$
21. $Z = 2$	22. $Z = 4625$
23. $B = 3864$	24. $B = 21482$

(24 marks)

25. 5500	26. 47
27. 82	28. 36

(8 marks)

29.	a) $X = 17$ b) $X = 14$ c) $X = 28$ **(3 marks)**
30.	a) Answer 214 **(2 mark)** b) Answer 1 **(2 mark)**

Revision Test 7

Topics covered: Problem Solving- Mixed Operations **Time: 30 minutes**

Maximum Mark: 40 **Your Mark: _____**

1.

Answer 19 **(2 marks)**

2.

Answer Since the total number of students in the school is 500, to find the number of students who use private vehicles, I subtracted the total number of students whose mode of transportation I knew from the total student population given. My answer, 163, represents the number of students who use private vehicles as their mode of transport.

_____ **(4 marks)**

3.

Answer 448 **(2 marks)**

4.

Answer 384 **(2 marks)**

5.

Answer 54 **(2 marks)**

a)

Answer First, I found the number of cherries Andrew has $(94 \times 6 = 564)$. I then calculated how many cherries Andrew and **(2 marks)**

	Kareema had altogether $(564 + 94 = 658)$. Finally, I calculated the number of groups of 12 that can be obtained by dividing 658 by 12 which resulted in 54 groups. _____	
6.	Answer $56\ years$	**(2 marks)**
7.	Answer 8208	**(2 marks)**
8.	Answer 68	**(4 marks)**
9.	Answer 8	**(3 marks)**
10.	a) Answer $438\ cakes$ b) Answer $70\ weeks$	**(2 marks)** **(2 marks)**
11.	a) Answer 12 b)	**(2 marks)**

Answer First I found the number of slices required to feed 46 persons $(46 \times 2 = 92)$. Then I found the exact number of pizzas needed by dividing 92 by 8 which resulted in $11\frac{1}{2}$ pizzas. Therefore, 12 whole pizzas will need to be purchased.

_____ **(2 marks)**

12.

Answer 21 buses **(3 marks)**

13. a)

Answer 57 **(2 marks)**

b)

Answer 9 *rows* **(2 marks)**

14.

Answer 14 *roses* **(2 marks)**

15. a)

Answer $46m$ **(2 marks)**

b)

Answer $28m$ **(2 marks)**

Revision Test 8

Topics covered: Type of numbers, square numbers and square root of numbers

Maximum Mark: 72 **Time: 45 minutes**

Your Mark: _____

1. a)

Answer $2, 18, 36, 50$ **(1 mark)**

b)

Answer $1, 5, 9, 13, 15, 21, 25, 41, 43$ **(1 mark)**

c)

Answer $2, 5, 13, 41, 43$ **(1 mark)**

d)

Answer $9, 15, 18, 21, 36$ **(1 mark)**

e)

Answer $1, 2, 5, 25, 50$ **(1 mark)**

2.

Number	Multiples	Factors
	$6, 12$	$1, 2, 3, 6$
	$18, 36$	$1, 2, 3, 6, 9, 18$
	$27, 54$	$1,3 ,9, 27$

	$31, 62$	$1, 31$
	$14, 28$	$1, 2, 7, 14$
	$17, 34$	$1, 17$
	$20, 40$	$1, 2, 4, 5, 10, 20$
	$24, 48$	$1, 2, 3, 4, 6, 8, 12, 24$
	$40, 80$	$1, 2, 4, 5, 8, 10, 20, 40$
	$47, 94$	$1, 47$

(20marks)

3.

Answer A factor of a number is any number that can be divided exactly by the number while a multiple of a number is a number obtained from multiplying the number by another.

For example, 6 is a factor of 18, since 18 can be divided by 6 an exact number of times, and 6 is also a multiple of 3 since 6 can be obtained by multiplying 3 by 2.

(3 marks)

4.

Answer Prime numbers are numbers whose only factors are 1 and itself. Seventeen is an example of a prime number since 1 and itself (17) 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, 10 is a composite number as 1,2,5, and 10 are factors.

_____ **(3 marks)**

5.

Answer A square number is the result of the product of a number by itself while a multiple of a number is a number obtained by multiplying the number by another. Therefore, Shenelle's answer is not fully correct. Both 48 and 16 are multiples of 4, however, 145 is not a perfect square number while 25 is. Thus, Shenelle's answer is not correct.

_____ **(3 marks)**

6. Complete the table below.

Number	Square of number

	9
	16
	25
	36
	49
	64
	81
	100
	121
	144

(10marks)

7. 729	8. 225
9. 529	10. 1521

11. 20	12. 16
13. 40	14. 25

(16 marks)

15. a)

Answer 5 **(3 marks)**

Answer 550 **(3 marks)**

b)

Answer 175 **(3 marks)**

a)

Answer $1\frac{1}{4}$ **(3 marks)**

Revision Test 9

Topics covered: Patterns **Time: 20 minutes**

Maximum Mark: 30 **Your Mark: _____**

1.

Pattern	Pattern rule
	Consecutive odd numbers
	A repeating pattern where 5,9,13,16 *is repeated.*
	Add 5 *then subtract* 3 *consecutively.*
	Square root of consecutive perfect square numbers.
	Even square numbers in descending order.
	Repeating sequence where 123 *is repeated.*
	Add 1 *to the previous rule to get the next term.*
	Divide by 2 *to get the next term.*
	Multiplied by 3 *to get the next term.*

(9 marks)

2. Complete the following patterns.

Pattern	Missing elements
	$A = 64$ $B = \sqrt{49}$ $C = 21$
Repeating sequence	$A = 1$ $B = 5$ $C = 7$
$+18, +15, +12, +9, +6, +3$	$A = 59$ $B = 65$ $C = 68$
$+1, +2, +3, +4, +5, +6, +7$	$A = 6$ $B = 24$ $C = 31$
Pattern rule: +5, -3	$A = 9$ $B = 20$ $C = 17$
Consecutive square numbers	$A = 49$ $B = 100$ $C = 121$
Consecutive multiples of 7	$A = 14$ $B = 42$ $C = 49$

(21marks)

Revision Test 10

Topics covered: Direct Proportion **Time: 40 minutes**

Maximum Mark: 40 **Your Mark: _____**

1. Answer $\$28.48$	**(1 mark)**
2. Answer $14093\ pages$	**(1 mark)**
3. Answer $\$3281.25$	**(2 marks)**
4. Answer $42\ cherries$	**(3 marks)**
5. Answer $\$142.50$	**(3 marks)**
6. Answer $6566\ cakes$	**(2 marks)**
7. a) Answer $39\ books$	**(2 marks)**
b) Answer $195\ books$	**(1 mark)**
8. Answer $89\ cents\ or\ \$0.89$	**(2 marks)**

9. Answer $500USD$	**(3 marks)**
10. a) Answer $3.40cm$	**(1 mark)**
b) Answer $140km$	**(1 mark)**
11. Answer $5.33	**(3 marks)**
12. Answer $15.45	**(2 marks)**
13. Answer $6.50	**(3 marks)**
14. Answer $7.26	**(3 marks)**
15. Answer $9.99 per cookie $4.50 per soft drink.	**(4 marks)**
16. a)	

Answer $2\ days$ **(2 marks)**

b)

Answer $10\ days$ **(2 marks)**

Revision Test 11

Topics covered: Unequal Sharing **Time: 30 minutes**

Maximum Mark: 42 **Your Mark: _____**

1. Answer $Shevelle = 33, Shaydon = 72$	**(3 marks)**
2. Answer $Pam = \$4275,\ Andy = \$8775$	**(3 marks)**
3. Answer $Tee - shirt = \$337.50, Shirt = \$487.50$	**(3 marks)**
4. Answer $Shawnte = \$275$	**(3 marks)**
5. Answer $Men = 633, Women = 867$	**(3 marks)**
6. Answer $Cyan = 5\ years, Shreya = 10\ years$	**(3 marks)**
7. Answer $Joe = \$119, Barry = \$833$	**(3 marks)**
8. Answer $27\ coconuts$	**(3 marks)**
9. Answer $Soft\ drink = 34\ cases, water = 68\ cases$	**(3 marks)**

10. Answer $Pens = 95, Pencils = 57$	**(3 marks)**
11. Answer $Jada =$ \$58 $Dorian =$ \$39 $Shane =$ \$25	**(4 marks)**
12. Answer $Travis =$ 10 $Siana =$ 7 $Sierra =$ 18	**(4 marks)**
13. Answer $Vendor\ A =$ 27 $Vendor\ B =$ 39 $Vendor\ C =$ _43	**(4 marks)**

Revision Test 12

Topics covered: Conversion between fractions, decimals and percentages **Time: 25 minutes**

Maximum Mark: 44 **Your Mark: _____**

Fraction	Decimal	Percent
$\frac{1}{2}$		50%
$\frac{1}{4}$	0.25	
	0.3333	$33\frac{1}{3}\%$ 33.33%
$\frac{1}{5}$	0.2	
	0.75	75%
$\frac{1}{10}$		10%
$\frac{1}{8}$	0.125	
	0.9	90%
$\frac{7}{8}$		87.5% $87\frac{1}{2}\%$

Fraction	Decimal	Percent
$\frac{4}{5}$	0.8	
$\frac{7}{10}$		70%
	0.4	40%
	0.6666	$66\frac{2}{3}\%$ 66.66%
$\frac{3}{5}$	0.6	
$\frac{5}{8}$		62.5% $62\frac{1}{2}\%$
	0.375	37.5% $37\frac{1}{2}\%$
$\frac{3}{10}$		30%

$\frac{3}{20}$		15%
	$= 0.04$	4%
$= \frac{11}{200}$	$= 0.055$	
	$= 0.022$	$= 2.2\%$
$\frac{33}{100}$	0.33	

$(44marks)$

Revision Test 13

Topics covered: **Representing and ordering fractions, equivalent fractions** **Time: 30 minutes**

Maximum Mark: 32 **Your Mark: _____**

1. *Shade any* 14 *blocks.*	**(1 mark)**
2. Answer $\frac{20}{36} = \frac{5}{9}$	**(1 mark)**
3. *Shade any* 14 *blocks.*	**(2 marks)**
4. a) Answer 84	**(1 mark)**
b) Answer 6	**(1 mark)**
c) Answer 66	**(1 mark)**
d) Answer 30	**(1 mark)**
5. a) $>$ $\frac{63}{84}$ $\frac{36}{84}$ or $\frac{9}{12}$ $\frac{9}{21}$ $(same\ numerator)$	**(1 mark)**

b) $>$ $\frac{54}{60}$ $\frac{50}{60}$

(1 mark)

c) $=$ $\frac{57}{76}$ $\frac{57}{76}$

(1 mark)

6.

Answer Improper fractions are fractions where the numerator is greater than the denominator, thus, the fraction has more parts than a whole. An example of an improper fraction is $\frac{5}{2}$. Proper fractions are fractions where the numerator is smaller than the denominator, thus, the fraction has less parts than a whole. An example of a proper fraction is $\frac{2}{5}$. Therefore, the improper fraction will be larger than the proper fraction since an improper fraction is always greater than a whole and a proper fraction is always smaller than a whole.

_____ **(3 marks)**

7. a)

Answer $\frac{4}{9}, \frac{1}{2}, \frac{2}{3}, \frac{5}{6}$ **(2 marks)**

b)

Answer $\frac{3}{4}, \frac{9}{14}, \frac{1}{2}, \frac{2}{7}$ **(2 marks)**

c)

Answer $\frac{5}{8}, \frac{5}{9}, \frac{5}{12}, \frac{5}{26}$ **(2 marks)**

8. Complete the table below.

Improper Fraction	Mixed Number
	$3\frac{2}{3}$
	$5\frac{1}{4}$
	$7\frac{9}{13}$
	$20\frac{5}{6}$
$\frac{11}{4}$	
$\frac{61}{9}$	
$\frac{133}{12}$	
$\frac{63}{4}$	

(8 marks)

9. a)

Answer $\frac{1}{3}$ **(1 mark)**

b)

Answer $\frac{11}{24}$ **(1 mark)**

c)

Answer $\frac{4}{5}$ **(1 mark)**

d)

Answer $\frac{1}{5}$ **(1 mark)**

Revision Test 14

Topics covered: Addition and subtraction of fractions **Time: 45 minutes**

Maximum Mark: 35 **Your Mark: _____**

1. $\frac{11}{15}$	2. $1\frac{2}{5}$
3. $1\frac{2}{45}$	4. $\frac{15}{16}$
5. $1\frac{5}{12}$	6. $\frac{19}{20}$

(6 marks)

7. $6\frac{3}{4}$	8. $10\frac{1}{9}$
9. $11\frac{11}{32}$	10. $9\frac{3}{10}$

(8 marks)

11. $\frac{5}{11}$	12. $\frac{11}{16}$
13. $\frac{3}{8}$	14. $\frac{1}{30}$
15. $5\frac{5}{9}$	16. $2\frac{4}{21}$

(6 marks)

17. $2\frac{11}{21}$	18. $5\frac{3}{10}$
19. $2\frac{2}{15}$	20. $3\frac{1}{4}$

(8 marks)

21. $1\frac{10}{21}$	22. $4\frac{7}{10}$
23. $1\frac{13}{15}$	24. $2\frac{3}{4}$

(8 marks)

25.

Answer $12\frac{1}{8}$ **(2 marks)**

26.

Answer 560 **(2 marks)**

27. a)

Answer $\frac{3}{5}$ **(1 mark)**

b)

Answer $\frac{2}{5}$ **(1 mark)**

28.

a)

Answer $\frac{11}{15}$ **(1 mark)**

b)

Answer $\frac{4}{15}$ **(1 mark)**

29. a)

Answer $\frac{25}{33}$ **(1 mark)**

b)

Answer $\frac{8}{11}$ **(1 mark)**

c)

Answer $\frac{17}{33}$ **(1 mark)**

Revision Test 15

Topics covered: Multiplication and division of fractions **Time: 20 minutes**

Maximum Mark: 31 **Your Mark: _____**

1. 60	2. 28
3. 80	4. 28
5. 14	6. 72

7. $\frac{1}{5}$	8. $\frac{1}{8}$
9. $\frac{1}{56}$	10. 15
11. 20	12. 40

(24 marks)

25.	a) Answer $2L$	**(2 marks)**
	b) Answer $12\frac{1}{4}L$	**(1 mark)**
26.	a) Answer $9m$	**(1 mark)**
	b) Answer 12 pieces	**(1 mark)**
27.	Answer 24 years old	**(1 mark)**
28.	Answer 28 pieces	**(1 mark)**

Revision Test 16

Topics covered: Multi-step fraction questions **Time: 50 minutes**

Maximum Mark: 52 **Your Mark: _____**

1.	a) Answer $2\frac{3}{5}$	**(2 marks)**
	b) Answer $6\frac{3}{8}$	**(2 marks)**
2.	a) Answer $\$70.35$	**(1 mark)**
	b) Answer $85\ mangoes$	**(2 marks)**
	c) Answer 105	**(2 marks)**
3.	a) Answer $\$189$	**(2 marks)**
	b) Answer $135\ mangoes$	**(2 marks)**
	c) Answer $\$42$	**(3 marks)**
4.		

	Answer $18\ pineapples$	**(2 marks)**
5.	Answer $30\ peaches$	**(2 marks)**
6.	a) Answer $\frac{5}{12}$	**(2 marks)**
	b) Answer $\$84$	**(1 mark)**
7.	Answer $\frac{7}{20}$	**(2 marks)**
8.	Answer $\frac{8}{21}$	**(2 marks)**
9.	Answer 400	**(3 marks)**
10.	a) Answer 36	**(3 marks)**
	b) Answer $\frac{17}{20}$	**(1 mark)**
11.	a) Answer $\frac{1}{2}$	**(1 mark)**
	b) Answer $\$150$	**(2 marks)**

12.	a) Answer $\$1920$ b) Answer $\$4800$	**(2 marks)** **(2 marks)**
13.	Answer $\$48$	**(4 marks)**
14.	Answer $\frac{1}{5}$	**(3 marks)**
15.	Answer $\$657$	**(4 marks)**
16.	Answer $\frac{13}{16}$	**(4 marks)**
17.	Answer $300\ cupcakes$	**(2 marks)**
18.	Answer $F = 5\frac{1}{4}, G = 5\frac{5}{8}$	**(4 marks)**
19.	Answer $E = 3\frac{7}{12}$	**(3 marks)**
20.	Answer $11\frac{13}{24}$	**(3 marks)**
21.	Answer $\frac{3}{16}$	**(3 marks)**

22.

Answer 10 **(4 marks)**

Revision Test 17

Topics covered: Decimals- mixed operations **Time: 30 minutes**

Maximum Mark: 24 **Your Mark: _____**

1. Answer 2.58	**(1 mark)**
2. Answer 0.3333	**(1 mark)**
3. Answer 0.25	**(1 mark)**
4. a) Answer 0.125	**(1 mark)**
b) Answer 0.13	**(1 mark)**
5. Answer $0.4 = \frac{4}{10} = shade\ any\ 4\ squares$	**(1 mark)**
6. Answer 5.75	**(1 mark)**
7. Answer 250	**(1 mark)**
8. Answer 0.5	**(1 mark)**

9. 11.9	10. 11.6
11. 94.95	12. 25.94
13. 873.94	14. 233.00

15. 4.21	16. 49.09
17. 26.07	18. 33.99
19. 16.39	20. 82.59

21. 18.76	22. 4.24
23. 2238.2	24. 504.63
25. 78.72	26. 50.36

27. 11.03	28. 16.2
29. 2.04	30. 55.55
31. 3.09	32. 16.2

(16 marks)

Revision Test 18

Topics covered: Multi-step decimal questions **Time: 25 minutes**

Maximum Mark: 34 **Your Mark: _____**

1.	
	Answer 0.75 **(3 marks)**
2.	a)
	Answer $300\ oranges$ **(2 marks)**
	b)
	Answer 0.8 **(2 marks)**
3.	
	Answer $0.91m\ or\ 91cm$ **(2 marks)**
4.	a)
	Answer 0.125 **(2 marks)**
	b)
	Answer $15\ boys$ **(2 marks)**
5.	
	Answer $180\ boys$ **(3 marks)**
6.	a)
	Answer 0.525 **(1 mark)**
	b)
	Answer $\$63.00$ **(2 marks)**
7.	

Answer $11.12m$	**(3 marks)**
8. a) Answer 0.55	**(2 marks)**
b) Answer $29\ classrooms\ are\ needed$	**(1 mark)**
9. Answer $\$225.00$	**(3 marks)**
10. a) Answer $17.5\ marks$	**(1 mark)**
b) Answer $22\ marks$	**(1 mark)**
11. Answer Lyeesha is comparing $\frac{1}{20}$ which is a fraction and 0.05 which is a decimal. If she converts 0.05 to a fraction, she will get $\frac{5}{100}$ which when simplified to its lowest terms becomes $\frac{1}{20}$. Since the numerator indicates the number of parts being considered and the denominator indicates the number of parts the whole is divided into, it is clear that both 0.05 and $\frac{1}{20}$ are equal as they both represent 1 part out of 20.	**(3 marks)**

Revision Test 19

Topics covered: Percentages **Time: 20 minutes**

Maximum Mark: 33 **Your Mark: _____**

1.	a) Answer 22.5	**(1 mark)**
	b) Answer $33\frac{1}{3}\%$	**(1 mark)**
	c) Answer 160	**(1 mark)**
	d) Answer 550	**(1 mark)**
2.	Answer 39 *marbles*	**(1 mark)**
3.	Answer 56 *girls*	**(1 mark)**
4.	Answer 18 *crayons*	**(1 mark)**
5.	a) Answer 30%	**(1 mark)**
	b) Answer 1200 *persons*	**(2 marks)**
	c)	

	Answer 10%	**(1 mark)**
6.	a) Answer $150\ were\ ripe$	**(1 mark)**
	b) Answer $75\ were\ rotten$	**(2 marks)**
7.	Answer $\$38$	**(2 marks)**
8.	a) Answer $72\ eggs$	**(2 marks)**
	b) Answer 10%	**(1 mark)**
9.	a) Answer 115	**(2 marks)**
	b) Answer $33\frac{1}{3}\%$	**(2 marks)**
10.	Answer $55\ marbles$	**(4 marks)**
11.	a) Ascending Order $30\%, 0.35, \frac{1}{2}, 3$	**(1 mark)**
	Descending Order $3, \frac{1}{2}, 0.35, 30\%$	**(1 mark)**

b)

Ascending Order $0.6666, \frac{7}{8}, 90\%, 6$ **(1 mark)**

Descending Order $6, 90\%, \frac{7}{8}, 0.6666$ **(1 mark)**

c)

Ascending Order $\frac{19}{20}, 0.98, 100\%, 7$ **(1 mark)**

Descending Order $7, 100\%, 0.98, \frac{19}{20}$ **(1 mark)**

Revision Test 20

Topics covered: Money, bills and change **Time: 30 minutes**

Maximum Mark: 27 **Your Mark: _____**

1. $66.00	2. $220.00
3. $664.98	4. $2665.27
5. $9584.12	6. $8539.82

7. $461.00	8. $139.00
9. $201.91	10. $1092.51
11. $3721.55	12. $7108.95

13. $33.04	14. $4936.00
15. $8255.07	16. $64 903.93
17. $9828.24	18. $10 204.88

19. $9.01	20. $75.53
21. $201.86	22. $503.03
23. $712.05	24. $359.14

25.

Quantity	Item	Unit Price	Cost
		$6.00	
			$10.00
5kg			
Total			

(3 marks)

26.

Answer $2.00 **(1 mark)**

27.

Answer $52.45 **(1 mark)**

28.

Quantity	Item	Unit Price	Cost
			$34.50
5kg			
Subtotal			
Discount at 15%			$6.30
Total			$35.70

(4 marks)

29. a)

Answer $30.12 **(2 marks)**

b)

Answer $69.88 **(1 mark)**

30.

Answer $73.25 **(2 marks)**

31. a)

Answer $63.00 **(1 mark)**

b)

Answer $37.00 **(1 mark)**

32.

Item	Quantity	Unit Price	Cost
Water			
Rice		$27.50	
Flour	4.5 kg or $4\frac{1}{2}$ kg		

Subtotal	
Discount at 15%	$29.40
Total	$166.60

(4 marks)

33.

Bills	$100	$50	$20	$10	$5	$1
Amount	0	0	1	1	1	4

(4 marks)

34.

Quantity	Item	Unit Price	Cost
	Pizza		
	Calzone		
	Pasta	$56.75	
Subtotal			$663.00
Discount at 14%			$92.82
Total			$570.18

(4 marks)

35.

a)

Answer $3.60 **(1 mark)**

b)

i.

Answer $2.77 **(1 mark)**

ii.

Answer $11.08 **(1 mark)**

Revision Test 21

Topics covered: Discount and savings **Time: 25 minutes**

Maximum Mark: 25 **Your Mark: _____**

1.	a) Answer $41.25	**(1 mark)**
	b) Answer $288.75	**(1 mark)**
2.	Answer $2560	**(2 marks)**
3.	a) Answer $126.90	**(1 mark)**
	b) Answer $719.10	**(1 mark)**
4.	Answer $527.00	**(2 marks)**
5.	Answer $544	**(1 mark)**
6.	Answer $20.00	**(1 mark)**
7.	Answer $50.00	**(1 mark)**

8. Answer $4802.44	**(1 mark)**
9. Answer $32.00	**(1 mark)**
10. Answer $531.25	**(2 marks)**
11. Answer $175	**(2 marks)**
12. Answer $487.50	**(2 marks)**
13. Answer $357.00	**(2 marks)**
14. a) Answer $2760	**(1 mark)**
b) Answer $6440	**(1 mark)**
15. Answer $5460	**(2 marks)**

Revision Test 22

Topics covered: Profit and loss, best buy **Time: 30 minutes**

Maximum Mark: 40 **Your Mark: _____**

1. Answer $853	**(1 mark)**
2. Answer $1250.00	**(2 marks)**
3. Answer $4.81	**(1 mark)**
4. Answer $11.00	**(2 marks)**
5. Answer $1575	**(3 marks)**
6. Answer $43	**(3 marks)**
7. Answer $24.80	**(2 marks)**
8. Answer $7.25	**(3 marks)**
9. Answer $245	**(3 marks)**

10.	a) Answer $\$5249.30$	**(1 mark)**
	b) Answer $\$4129.30$	**(1 mark)**
11.	Answer $\$1325.25$	**(3 marks)**
12.	Answer $Bag\ A$	**(2 marks)**
13.	Answer From my calculations, Vendor B is selling tomatoes cheaper and therefore, Elizabeth should purchase tomatoes from Vendor B. I arrived at this conclusion by calculating the cost of 1kg of tomatoes from each vendor. The result of this was compared to determine the lower cost. The lower the cost implies the cheaper the tomatoes per kilogram.	**(3 marks)**
14.	Answer Kalain purchased potatoes at a more expensive rate. I arrived at this answer by calculating the amount Kalain and Dylan will pay if they each purchased 14kg of potatoes. From the information given, I know Dylan will pay \$46.00. However, if Kalain paid \$25.00 for 7kg then he will pay \$50 for 14kg. Thus, Kalain purchased the potatoes at a more	**(3 marks)**

	expensive rate as he will pay $4.00 more than Dylan if they both purchased 14kg of potatoes. _____	
15.	Answer *Option 2*	**(2 marks)**
16.	Answer *Supplier 1*	**(2 marks)**

Revision Test 23

Topics covered: Metric system- length and mass **Time: 25 minutes**

Maximum Mark: 44 **Your Mark: _____**

1. a) $2km$

b) $5500mm$

c) $7500m$

d) $2300m$

e) $0.792kg$

f) $300cm$

g) $147cm$

h) $1.038kg$

i) $63cm$

j) $13.45km$

k) $35mm$

l) $382\ 000g$

m) $6590m$

n) $8.3cm$

o) $0.6897km$

p) $4820g$ **(16 marks)**

2. a)

Answer $3.5m$ **(1 mark)**

b)

Answer $8.75m$ **(2 marks)**

3. a)

Answer $15.35m$ **(1 mark)**

b)

Answer $1535cm$ **(1 mark)**

4.

Answer $1174cm$ **(3 marks)**

5.

Answer $13.78m$ **(2 marks)**

6.

Answer $54cm$ **(2 marks)**

7.

a)

Answer $2.3cm$ **(1 mark)**

	b) Answer $2cm$	**(1 mark)**
8.	a) Answer $22.79m$ b) Answer $2279cm$	**(2 marks)** **(1 mark)**
9.	Answer $0.025m$	**(1 mark)**
10.	Answer $3cm$	**(1 mark)**
11.	Answer $25\ packets$	**(1 mark)**
12.	a) Answer From the information given, 9 pears are on one side of a scale and 3 pears and a pineapple are on the other side. The scale is balanced. Therefore, the number of pears whose mass is equivalent to that of 1 pineapple can be found by subtracting the 3 pears from Side B from the number of pears from Side A to remain with 1 pineapple, $9 - 3 = 6\ pears$. This is correct because if I remove the same number of pears from each side (3 pears) the scale will still be balanced and will be left with 6 pears on Side A and a pineapple on Side B. Thus, the mass of 1 pineapple is equivalent to the mass of 6 pears. _____	**(2 marks)**

	b) Answer $2.61kg\ or\ 2610g$	**(2 marks)**
13.	Answer $0.06kg\ or\ 60g$	**(2 marks)**
14.	a) Answer $13.59kg$ b) Answer $1410g$	**(1 mark)** **(1 mark)**

Revision Test 24

Topics covered: Time **Time: 35 minutes**

Maximum Mark: 52 **Your Mark: _____**

1.

a)

Answer $1\frac{1}{10}\ hours$ **(1 mark)**

b)

Answer $2\frac{1}{2}\ or\ 2.5\ hours$ **(1 mark)**

c)

Answer $3\frac{3}{4}\ or\ 3.75\ hours$ **(1 mark)**

d)

Answer $5\frac{3}{5}\ or\ 5.6\ hours$ **(1 mark)**

e)

Answer $7\frac{2}{5}\ or\ 7.4\ hours$ **(1 mark)**

f)

Answer $5\frac{2}{3}\ hours$ **(1 mark)**

g)

Answer $8\frac{1}{3}\ hours$ **(1 mark)**

2. a)

Answer $120\ minutes$ **(1 mark)**

b)

Answer $210\ minutes$ **(1 mark)**

c)

Answer $345\ minutes$ **(1 mark)**

d)

Answer $552\ minutes$ **(1 mark)**

e)

Answer $460\ minutes$ **(1 mark)**

f)

Answer $405\ minutes$ **(1 mark)**

g)

Answer $267\ minutes$ **(1 mark)**

3. **STUDENT MUST STATE AM OR PM.**

Standard Digital Time	Analogue Time	Analogue Time in Words
		Half past twelve o'clock in the morning
		Quarter past one o'clock in the afternoon
$2:40pm$		Twenty minutes to three o'clock in the afternoon
$12:10am$		Ten minutes past twelve o'clock in the morning
$5:25pm$		
$9:50am$		

(12marks)

4. a)

Answer $5:20pm$ **(1 mark)**

b)

Answer $3:05pm$ **(1 mark)**

c)

(1 mark)

5.

a)

Answer $8:03am$ **(1 mark)**

b)

Answer $27\ minutes$ **(1 mark)**

c)

Answer $3:05pm$ **(1 mark)**

6. a)

Answer $108\ pages$ **(1 mark)**

b)

(2 marks)

7.

a)

Answer $3:50$ **(1 mark)**

b)

(1 mark)

8.

Answer $6:15pm$ **(2 marks)**

9. a)

Answer $11:03am$ **(1 mark)**

b)

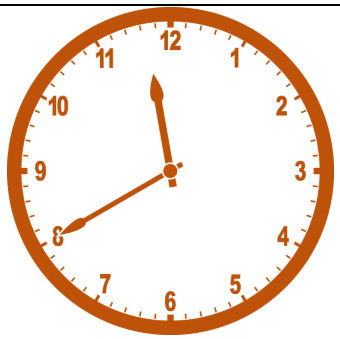
Answer $2\ hours\ 33\ minutes$ **(1 mark)**

c)

Answer $4{:}\ 09pm$ **(1 mark)**

10.

$11{:}\ 40$



(2 marks)

11.

a)

Answer $Thursday$ **(1 mark)**

b)

Answer $Monday$ **(1 mark)**

c)

Answer $Saturday$ **(1 mark)**

d)

Answer $Friday\ 24^{th}\ April, 2020.$ **(1 mark)**

12.

a)

Answer 14: 38 **(1 mark)**

b)

Answer I believe Toronto is the furthest from the airport of departure because the flight takes 5 hours and 43 minutes to arrive which is longer than the time taken to arrive at New Your or Fort Lauderdale which is 4 hours and 48 minutes and 3 hours and 51 minutes respectively.

_____ **(3 marks)**

Revision Test 25

Topics covered: Area and perimeter **Time: 60 minutes**

Maximum Mark: 82 **Your Mark: _____**

1. a)

Answer $P = 42m$ **(2 marks)**

b)

Answer $P = 60m$ **(2 marks)**

c)

Answer $P = 152m$ **(2 marks)**

d)

Answer $P = 81.4cm$ **(2 marks)**

e)

Answer $P = 254.6cm$ **(2 marks)**

f)

Answer $P = 233.8cm$ **(2 marks)**

g)

Answer $P = 108cm$ **(2 marks)**

h)

Answer $P = 76m$ **(2 marks)**

i)

Answer $P = 140m$ **(2 marks)**

j)

Answer $P = 40m$ **(2 marks)**

k)

Answer $P = 92cm$ **(2 marks)**

l)

Answer $P = 168cm$ **(2 marks)**

2. a)

Answer $6.5m$ **(1 mark)**

b)

Answer $17cm$ **(1 mark)**

c)

Answer $17.25m$ **(2 marks)**

3.

Answer From the calculations above, it was found that the perimeter of the rug and the perimeter of the room are 40m and 77m respectively. Therefore, the perimeter of the room is larger than the perimeter of the rug.

_____ **(3 marks)**

4. a)

Answer $76m$ **(2 marks)**

b)

Answer $60m$ **(1 mark)**

c)

Answer Josh and Jesarah each covered a distance of 76m and 60m respectively. It is clear that Josh covered a greater distance than Jesarah did.

(1 mark)

5.

Answer $24m$ **(3 marks)**

6.

Answer The perimeter of A and the perimeter of B is 73m and 72m respectively. Therefore, the perimeter of A is larger by 1m than the perimeter of B.

(4 marks)

7.

Answer From the calculations above the perimeter of A, B and of the land is 3.3m, 2m and 11m. Therefore, the perimeter of A is larger than the perimeter of B but the perimeter of the land is larger than both the perimeter of A and of B.

(4 marks)

8.

Answer The perimeter refers to the distance around. Opposite sides in a rectangle are equal and thus a rectangle has 2 lengths and 2 widths. The perimeter can be found by $P = L + L + B + B$ which can be reduced to $P = (L + B) \times 2$.

Hence, the perimeter of a rectangle can be found by the product of the sum of the length and breadth by 2.

_____

(3 marks)

9.

Answer 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.

_____ **(3 marks)**

10.

Answer 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.

_____ **(3 marks)**

11.

Answer The area of a polygon is the number of square units inside the polygon. Unlike perimeter, area is two-dimensional. The area is therefore found by the product of the length and width/breadth as shown above.

(3 marks)

12.

a)

Answer $200cm$ **(1 mark)**

b)

Answer $2m$ **(1 mark)**

c)

Answer The perimeter of A is equal to the perimeter 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 units. Therefore, the perimeter of A is equivalent to the perimeter of B. Thus, $200cm$ is equivalent to $2m$.

(2 marks)

13.

Answer $55.5cm^2$ **(3 marks)**

14.	Answer $26cm^2$	**(3 marks)**
15.	Answer $17\ cm^2$	**(2 marks)**
16.	Answer $8\ cm^2$	**(2 marks)**
17.	Answer The perimeter of the square is $60m$ which is greater than the perimeter of the rectangle which is $24m$.. Therefore, with respect to area, the square is larger than the rectangle.	**(3 marks)**
18.	Answer $57.5\ cm^2$	**(4 marks)**
19.	Answer: A square of side 6 units	**(3 marks)**

Revision Test 26

Topics covered: Capacity and volume **Time: 40 minutes**

Maximum Mark: 50 **Your Mark: _____**

1.

a) $2L$

b) $550ml$

c) $7500ml$

d) $2300cm^3$

e) $0.792L$

f) $3cm^3$

(6 marks)

2.

Answer $29\ times$ **(2 marks)**

3.

Answer 28 cubes **(3 marks)**

4.

Answer 132 cubes **(3 marks)**

5.

Answer $360\ cm^3$ **(4 marks)**

6.

Answer 6 litres **(4 marks)**

7. Answer 129.6 kilograms	**(4 marks)**
8. a) Answer $330 b) Answer 18 kg	**(3 marks)** **(1 mark)**
9. a) Answer $1512\ cm^2$ b) Answer $9072	**(2 marks)** **(2 marks)**
10. a) Answer $15cm^3$ b) Answer $288cm^3$	**(2 marks)** **(2 marks)**
11. Answer $25\ cm^3$	**(4 marks)**

Revision Test 27

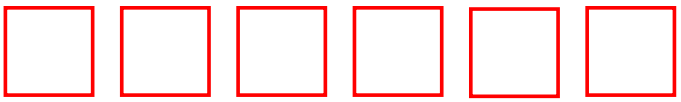
Topics covered: Solids **Time: 35 minutes**

Maximum Mark: 32 **Your Mark: _____**

1. a)

Answer *Cube* **(1 mark)**

b)



(1 mark)

c)

Answer A cube has 6 square faces which all are of the same dimensions.

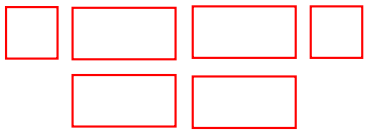
There are 8 vertices and 12 edges in a cube.

_____ **(2 marks)**

2. a)

Answer *Cuboid* **(1 mark)**

b)



(1 mark)

c)

Answer A cuboid has 6 faces. There are 2 equal square (or rectangular) faces and 4 equal rectangular (or square) faces. There are 8 vertices and 12 edges in a cuboid.

(2 marks)

3. a)

Answer *Cylinder* **(1 mark)**

b)

(1 mark)

c)

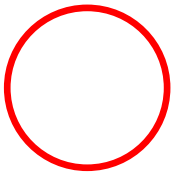
Answer A cylinder has 3 faces. There are 2 equal circular faces of equal dimensions and 1 curved rectangular (or in some cases, square) face. There are 0 vertices and 2 edges in a cylinder.

(2 marks)

4. a)

Answer *Sphere* **(1 mark)**

b)



One circle to represent the circular face of a sphere.

(1 mark)

c)

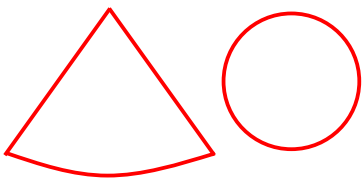
Answer A sphere has 1 curved face, 0 edges and 0 vertices.

_____ **(2 marks)**

5. a)

Answer *Cone* **(1 mark)**

b)



(1 mark)

c)

Answer A cone has 2 faces, 1 circular and another that is irregularly shaped. There is 1 edge and 1 vertex in a cone.

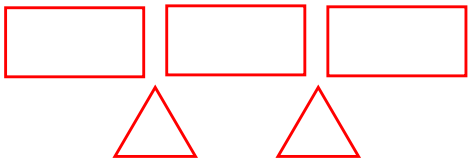
_____ **(2 marks)**

6.

a)

Answer *Triangular prism* **(1 mark)**

b)



(1 mark)

c)

Answer A triangular prism has 5 faces. There are 3 rectangular (or square) faces of equal dimensions and 2 triangular faces of equal dimensions. There are 9 edges and 6 vertices in a triangular prism.

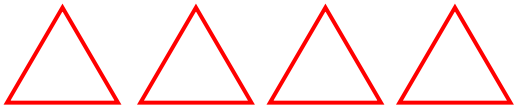
_____ **(2 marks)**

7.

a)

Answer *Triangular based pyramid* (or tetrahedron) **(1 mark)**

b)



(1 mark)

c)

Answer A triangular based pyramid has 4 triangular faces, 6 edges and 4 vertices.

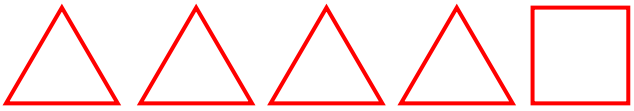
(2 marks)

8.

a)

Answer *Square (or rectangular) based pyramid* **(1 mark)**

b)



(1 mark)

c)

Answer A square (or rectangular) based pyramid has 5 faces. There are 4 triangular faces and one square (or rectangular) face. There are 8 edges and 5 vertices in a square (or rectangular) based pyramid.

(2 marks)

Revision Test 28

Topics covered: Cross-Sections **Time: 35 minutes**

Maximum Mark: 45 **Your Mark: _____**

1.

Answer The solid drawn is a cube and has a uniform cross-section. The cross-section of a solid refers to the shape seen when it is cut. Uniform cross-section implies that the cross-section is the same when it is cut. If the solid is cut vertically at different points a square cross section of equal dimensions will be seen. Similarly, if it is cut horizontally at different points a square cross section of equal dimensions will be seen.

_____ **(3 marks)**

2.

Answer The solid drawn is a cuboid and has a uniform cross-section. The cross-section of a solid refers to the shape seen when it is cut. Uniform cross-section implies that the cross-section is the same when it is cut. If the solid is cut vertically at different points a square cross section of equal dimensions will be seen. Similarly, if it is cut horizontally at different points a rectangular cross section of equal dimensions will be seen.

_____ **(3 marks)**

3.

Answer The solid drawn is a cylinder and has a uniform cross-section. The cross-section of a solid refers to the shape seen when it is cut. Uniform cross-section implies that the cross-section is the same when it is cut. If the cylinder is cut horizontally at different intervals throughout its length, a circular cross-section of the same dimensions will be seen. Therefore, the cylinder has a uniform cross-section.

_____ **(3 marks)**

4.

Answer The solid drawn is a cone and does not have a uniform cross-section. The cross-section of a solid refers to the shape seen when it is cut. Uniform cross-section implies that the cross-section is the same when it is cut. If the cone is cut horizontally at different intervals, a circular cross-section will be seen, however, of different sizes. If the cone is cut vertically at different intervals, a triangular cross-section will be seen, however, of different sizes.

_____ **(3 marks)**

5.

Answer The solid shown is a triangular prism. From theory it is known that all prisms have a uniform cross-section. The cross-section of a solid refers to the shape seen when it is cut. Uniform cross-section implies that **(3 marks)**

the cross-section is the same throughout the shape. If the triangular prism is cut vertically at different intervals throughout its length, a triangular cross-section of the same dimension will be seen. Therefore, the triangular prism has a uniform cross-section.

6.

Answer The solid drawn is a triangular based pyramid and does not have a uniform cross-section. The cross-section of a solid refers to the shape seen when it is cut. Uniform cross-section implies that the cross-section is the same when it is cut. The solid does not have a uniform-cross section because if it is cut vertically at different points a trapezium cross section (except when cut in the middle) will be seen but of different dimension. Similarly, if it is cut horizontally at different points, a triangular cross-section of different dimensions will be seen.

(3 marks)

7.

Answer The solid drawn is a square based pyramid and does not have a uniform cross-section. The cross-section of a solid refers to the shape seen when it is cut. Uniform cross-section implies that the cross-section is the same when it is cut. The solid does not have a uniform-cross section because if it is cut vertically at different points, a triangular cross section

(3 marks)

will be seen but of different dimension. Similarly, if it is cut horizontally at different points, a square cross-section of different dimensions will be seen.

8.

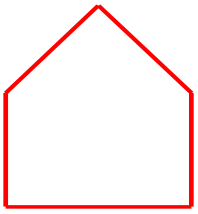
a)

Answer 15 **(1 mark)**

b) S

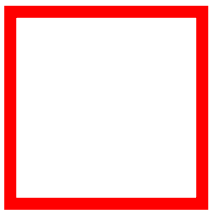
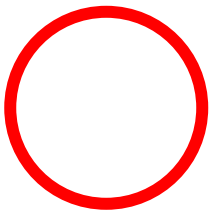
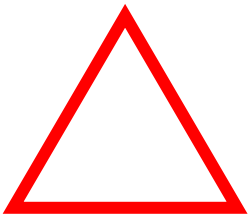
Answer 10 **(1 mark)**

c)



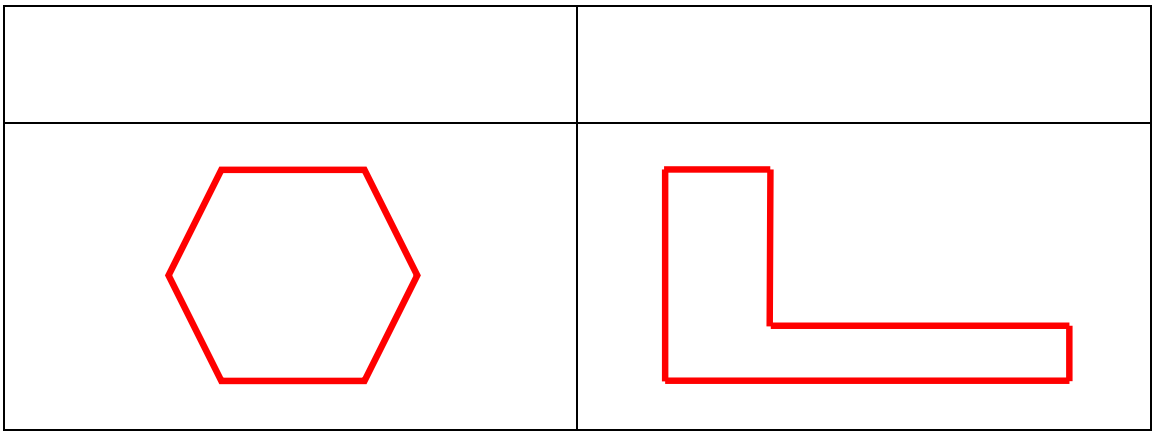
(2 marks)

9.

Cube	**Cylinder**	**Triangular Prism**
		

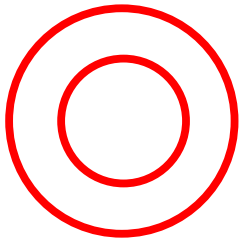
(3 marks)

10.



(4 marks)

11.



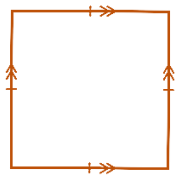
(2 marks)

Revision Test 29

Topics covered: Plane shapes **Time: 35 minutes**

Maximum Mark: 60 **Your Mark: _____**

1. a)



(2 marks)

b)

Answer A square has 4 equal sides, 4 equal angles of 90°, two pairs of parallel sides, 4 pairs of perpendicular sides and 4 lines of symmetry. Opposite sides in a square are equal and parallel.

_____ **(2 marks)**

2. a)

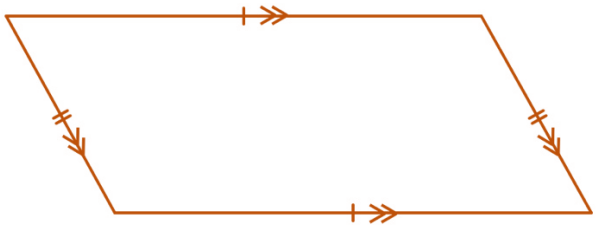
(2 marks)

b)

Answer A rectangle has 2 pairs of equal sides, 4 equal angles of 90°, two pairs of parallel sides, 4 pairs of perpendicular sides and 2 lines of symmetry. Opposite sides in a rectangle are equal and parallel.

_____ **(2 marks)**

3 a)



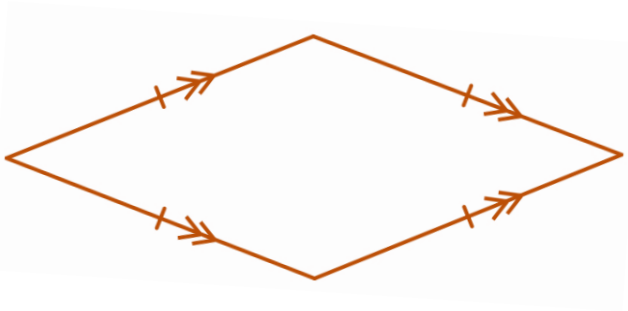
(2 marks)

b)

Answer A parallelogram has two pairs of parallel sides and two pairs of equal sides. Opposite sides are equal and parallel. Opposite angles are equal and there are 2 acute angles and 2 obtuse angles in a parallelogram. The angles in a parallelogram add up to 360°. A parallelogram has no lines of symmetry. There are no perpendicular sides in a parallelogram.

(2 marks)

4 a)



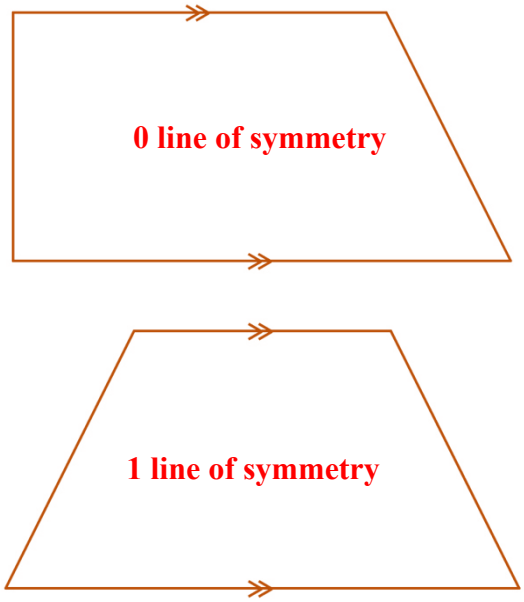
(2 marks)

b)

Answer A rhombus has 4 equal sides. Opposite sides in a rhombus are parallel. The angles in a rhombus add up to 360°. Opposite angles in a rhombus are equal and there are 2 acute angles and 2 obtuse angles. A rhombus has 2 lines of symmetry and no perpendicular sides.

(2 marks)

5. a)



(2 marks)

b)

Answer A trapezium is mainly characterized by having one pair of opposite sides that are parallel. The angles in a trapezium add up to 360° and there is at least one acute angle in the shape.

(2 marks)

6.

a)

Answer The triangle is an equilateral triangle. Two properties of this triangle are all sides and angles are equal and the shape has 3 lines of symmetry.

(2 marks)

b)

Answer This triangle is a regular polygon because a regular polygon has all equal sides and all equal angles and the triangle shown has all equal sides and angles.

(2 marks)

7.

a)

Answer The triangle shown is a scalene triangle and has 3 unequal sides and 3 unequal angles. The shape also has no lines of symmetry.

(2 marks)

b)

Answer This triangle is an irregular polygon because an irregular polygon does not have all equal sides and all equal angles and the triangle shown does not have equal sides and angles.

(2 marks)

8.

a)

Answer The triangle shown is a right-angle triangle and has at least 2 unequal sides and 3 unequal angles. The shape also has a right angle and no lines of symmetry.

_____ **(2 marks)**

b)

Answer This triangle is an irregular polygon because an irregular polygon does not have all equal sides and all equal angles and the triangle shown does not have all equal sides and angles.

_____ **(2 marks)**

9.

a)

Answer The triangle shown is an isosceles triangle and has two equal sides and two equal angles. The shape also has 1 line of symmetry.

_____ **(2 marks)**

b)

Answer This triangle is an irregular polygon because an irregular polygon does not have all equal sides and all equal angles and the triangle shown does not have all equal sides and angles.

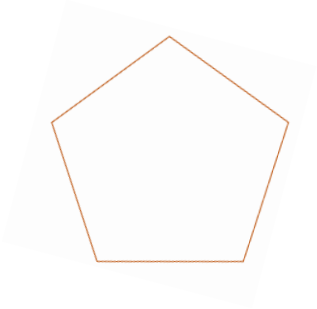
_____ **(2 marks)**

10.

Answer A regular polygon has all equal sides and all equal angles. A quadrilateral that is a regular polygon is a square because a square has 4 equal sides and 4 equal angles each being 90°.

(2 marks)

11. a)

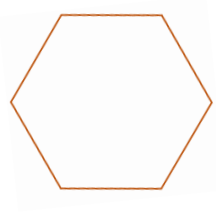
REGULAR	IRREGULAR
	ANY figure with 5 sides where all sides and angles are NOT equal.

(2 marks)

b)

Answer Pentagon **(1 mark)**

12. a)

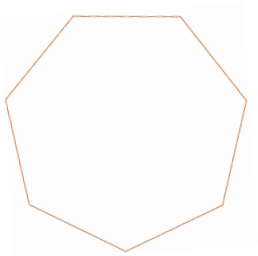
REGULAR	IRREGULAR
	ANY figure with 6 sides where all sides and angles are NOT equal.

(2 marks)

c)

Answer Hexagon **(1 mark)**

13. a)

REGULAR	IRREGULAR
	ANY figure with 8 sides where all sides and angles are NOT equal.

(2 marks)

b)

Answer Octagon **(1 mark)**

14.

a)

Answer B and E **(1 mark)**

b)

Answer B, D, E (**NOTE: Shape C is similar not different or the same**) **(1 mark)**

c)

Answer The two triangles which are similar are triangles A and C. Triangle A has 2 60° which means the third angle is also 60° since the angles in a triangle add up to 180°, which means each side is 9.3cm as all sides will be equal. In Triangle C each side is 27.9cm which is 3 times **(2 marks)**

more than 9.3cm and each angle will therefore be 60°. Thus, triangles A and C are similar as both are equilateral but C is 3 times larger than A.

15.

Answer Both the square and rectangle are quadrilaterals. In both shapes opposite sides are equal and parallel as well as the angles in each shape are equal and are all right angles. In a square, all sides are equal, however, in a rectangle there are 2 pairs of equal sides, each pair being of different lengths. Additionally, a square has 4 lines of symmetry and a rectangle has 2 lines of symmetry.

(3 marks)

16.

Answer Both the square and rhombus are quadrilaterals. In both shapes opposite sides are equal and parallel. All the sides in a square and rhombus are equal. A square has all equal angles which are right angles, however, this is not necessarily the same in a rhombus. However, opposite angles in a rhombus are equal. Additionally, a square has 4 lines of symmetry and a rhombus has 2 lines of symmetry.

(3 marks)

17.

Answer Both the parallelogram and trapezium are quadrilaterals. In a parallelogram opposite sides and angles are equal, however this is not the case in a trapezium. A parallelogram has 2 pairs of parallel sides while a trapezium has 1 pair of parallel sides.

_____ **(3 marks)**

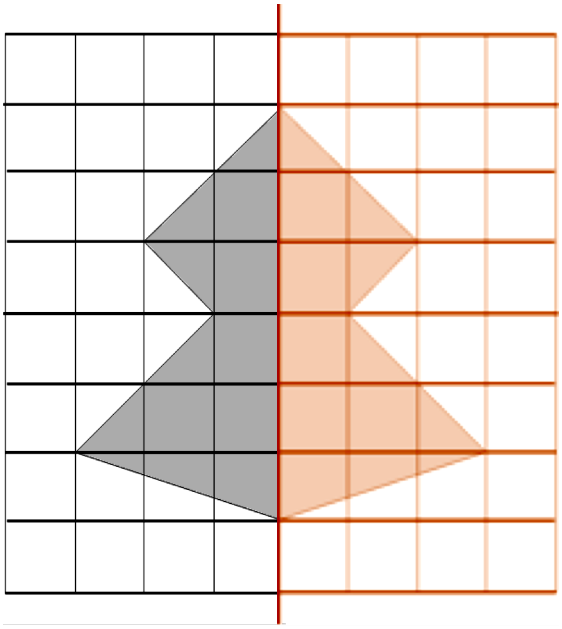
Revision Test 30

Topics covered: Symmetry **Time: 25 minutes**

Maximum Mark: 44 **Your Mark: _____**

1. =

a)

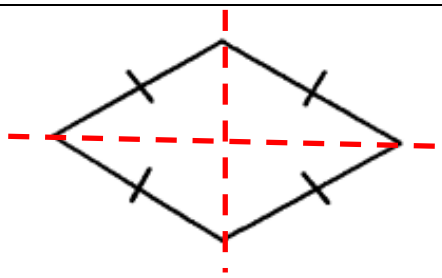


(2 marks)

b)

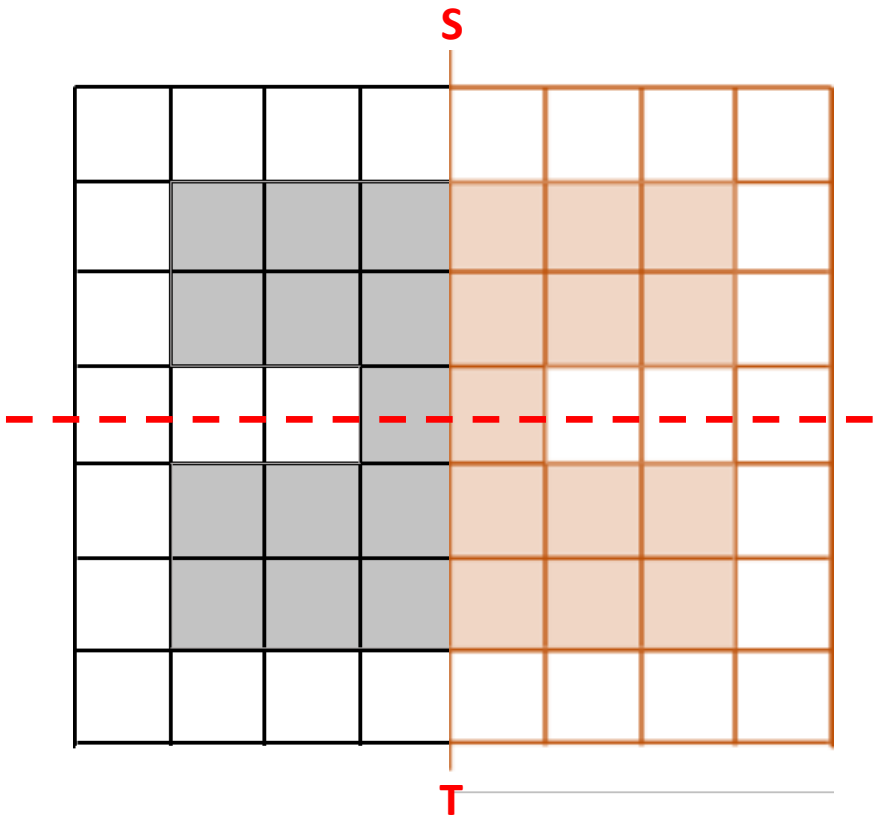
Answer 1 **(1 mark)**

2.



(1 mark)

3.



a)

(2 marks)

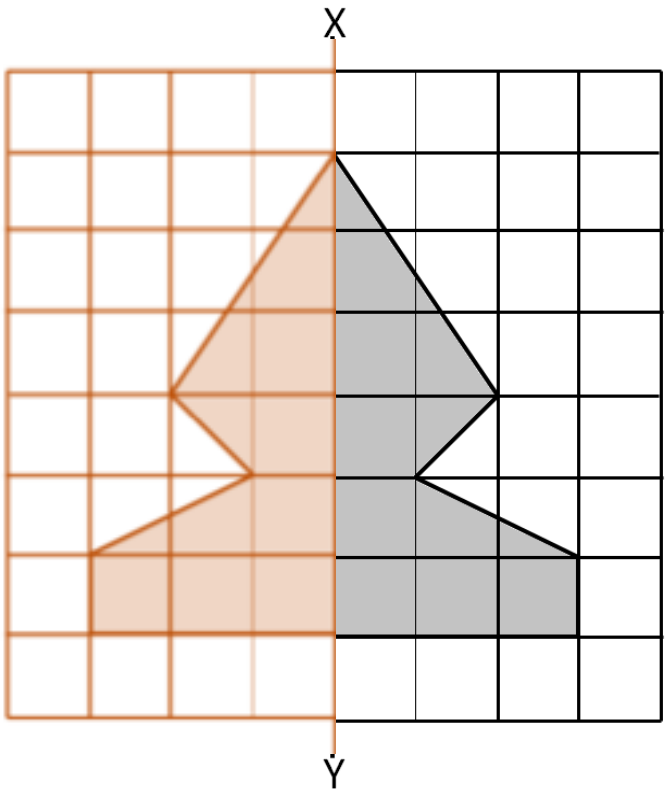
b)

(1 mark)

4.

Answer 1 **(1 mark)**

5.



(2 marks)

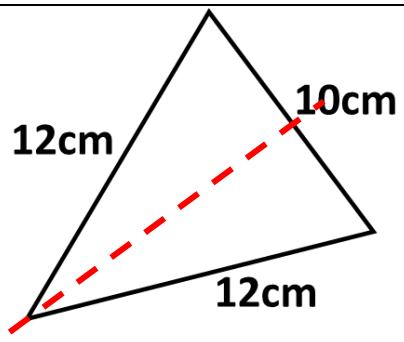
6.

Answer 1 **(1 mark)**

7.

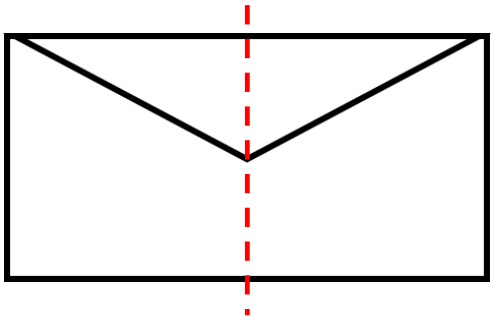
Answer CD **(1 mark)**

8.



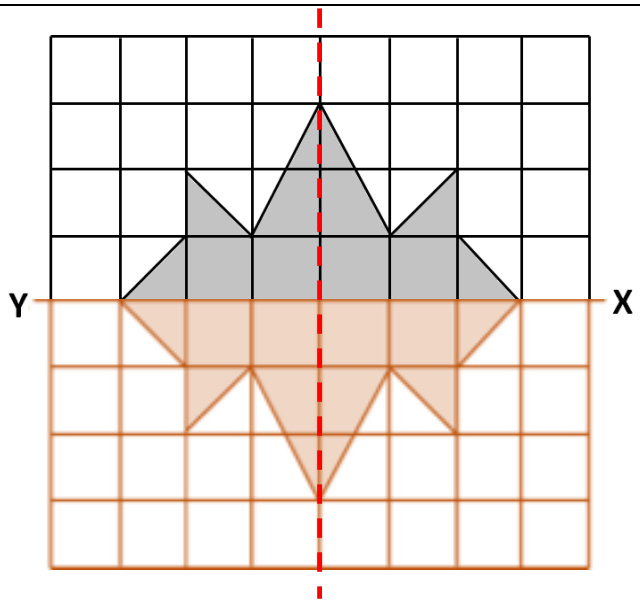
(1 mark)

9.



(1 mark)

10.



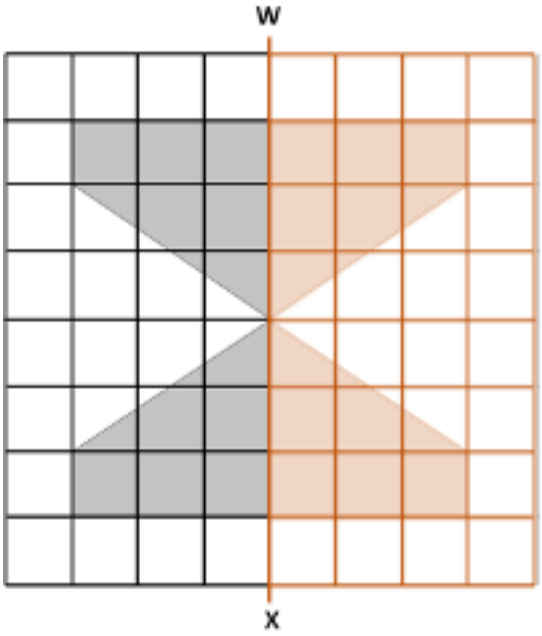
a)

(2 marks)

b)

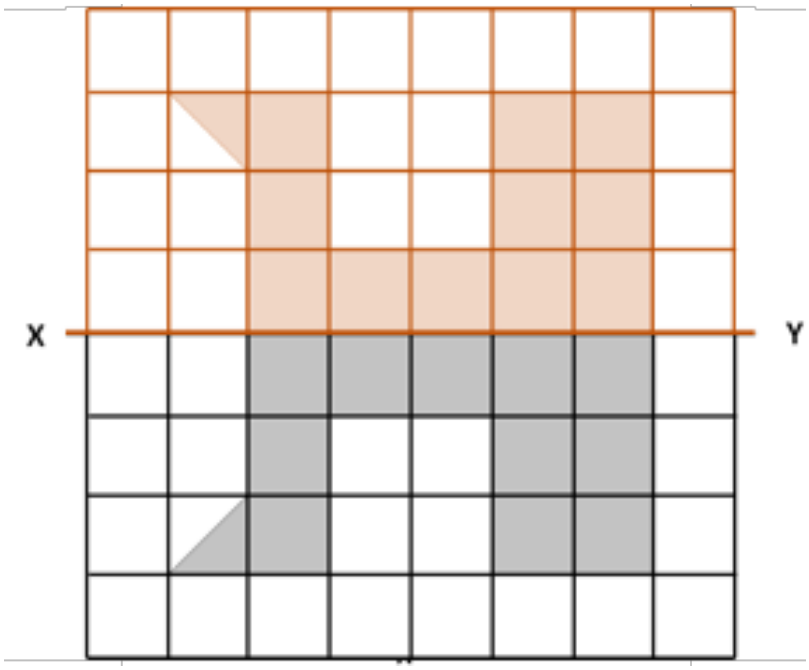
(1 mark)

11.



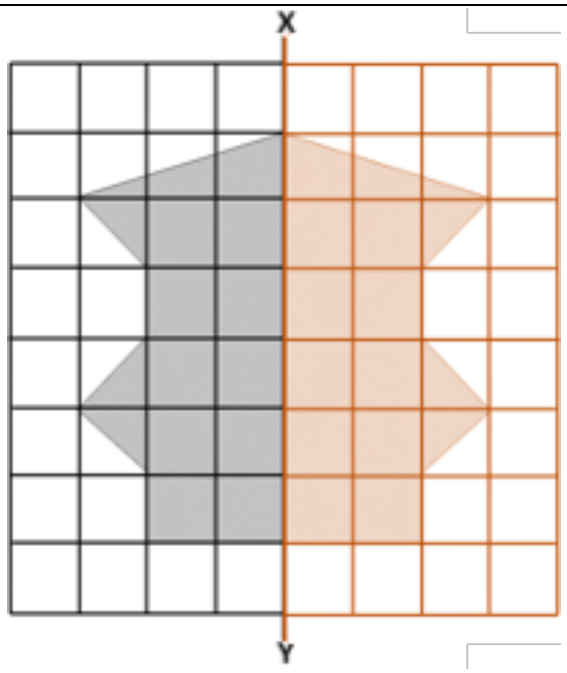
(2 marks)

12.



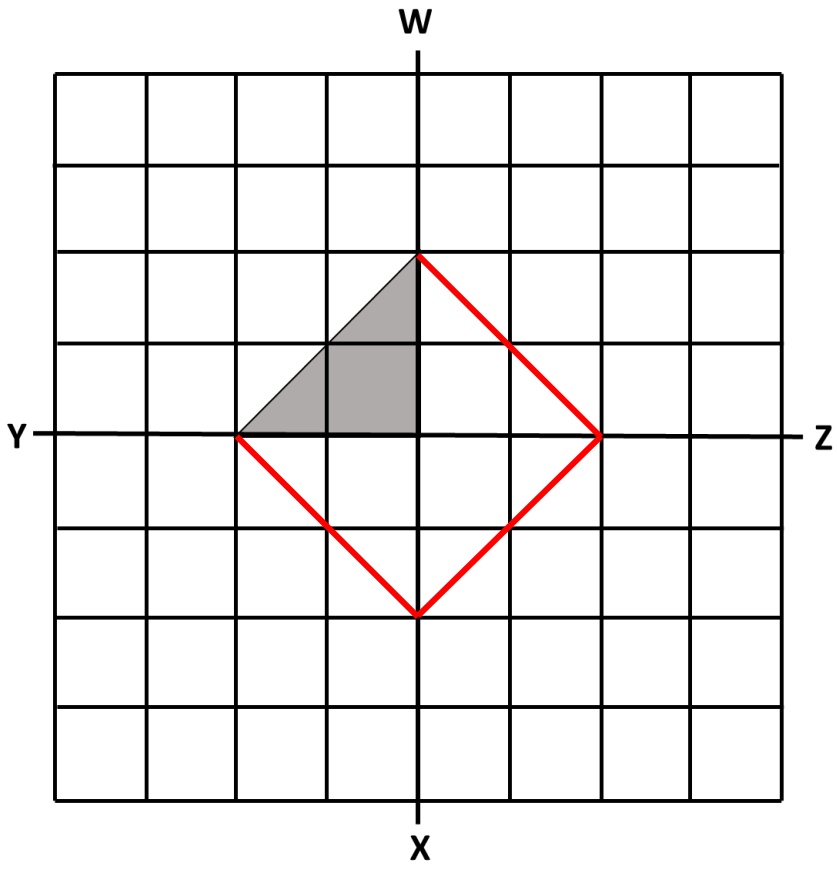
(2 marks)

13.



(2 marks)

14.



a)

Answer *Right angle triangle* **(1 mark)**

b)

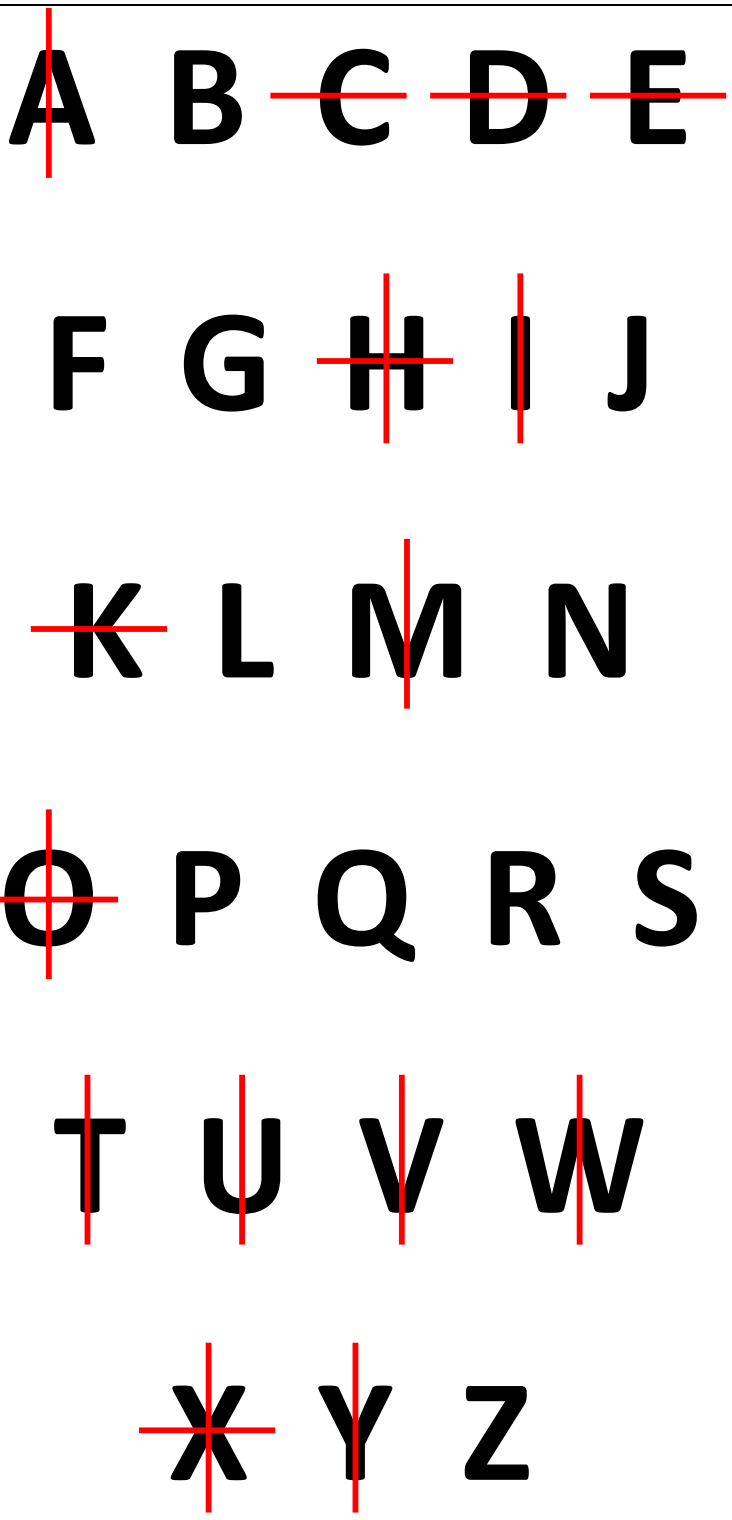
(2 marks)

15.

0 1 2 3 4 5 6 7 8 9

(3 marks)

16.



(15marks)

Revision Test 31

Topics covered: Angles **Time: 45 minutes**

Maximum Mark: 80 **Your Mark: _____**

1.	
	Answer B **(1 mark)**
2.	
	a)
	Answer $A \text{ or } C$ **(1 mark)**
	b)
	Answer B **(1 mark)**
	c)
	Answer D **(1 mark)**
3.	**The angle q above is $larger\ than\ a\ right\ angle$.** **(1 mark)**
4.	**Angle B is $smaller$ than Angle C.** **(1 mark)**
5.	
	Answer 13 **(2 marks)**
6.	a)
	Answer $South$ **(2 marks)**
	b)

Answer $East$	**(2 marks)**
7. Answer $\frac{3}{4}$	**(2 marks)**
8. Answer $\frac{1}{4} turn$	**(1 mark)**
9. Answer $\frac{1}{4} turn$	**(2 marks)**
10. a) Answer 4	**(1 mark)**
b) Answer 0	**(1 mark)**
c) Answer 0	**(1 mark)**
11. a) Answer smaller than	**(1 mark)**
b) Answer equal	**(1 mark)**
c) Answer smaller than	**(1 mark)**
12.	

Answer $24\ right\ angles$ **(2 marks)**

13.

a)

Answer equal **(1 mark)**

b)

Answer smaller than **(1 mark)**

c)

Answer equal **(1 mark)**

14.

a)

Answer smaller than **(1 mark)**

b)

Answer smaller than **(1 mark)**

c)

Answer larger than **(1 mark)**

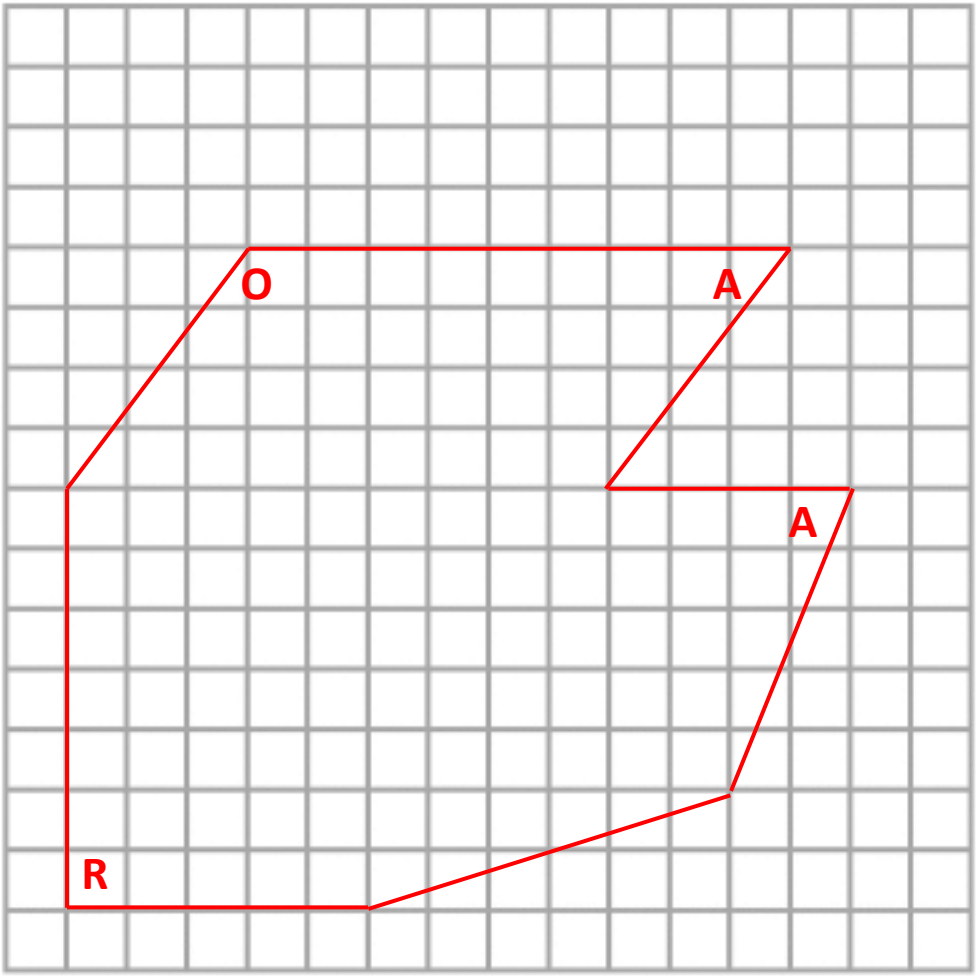
15.

(i) An irregular polygon with 8 sides. **(1 mark)**

(ii) Has at least 2 angles smaller than a right angle. Label each angle 'A' **(1 mark)**

(iii) Has at least 1 angle larger than a right angle. Label each angle 'O' **(1 mark)**

(iv) Has at least 1 right angle. Label each anngle 'R' **(1 mark)**



The above is only 1 possible answer. There are many varying possibilities of correct answers.

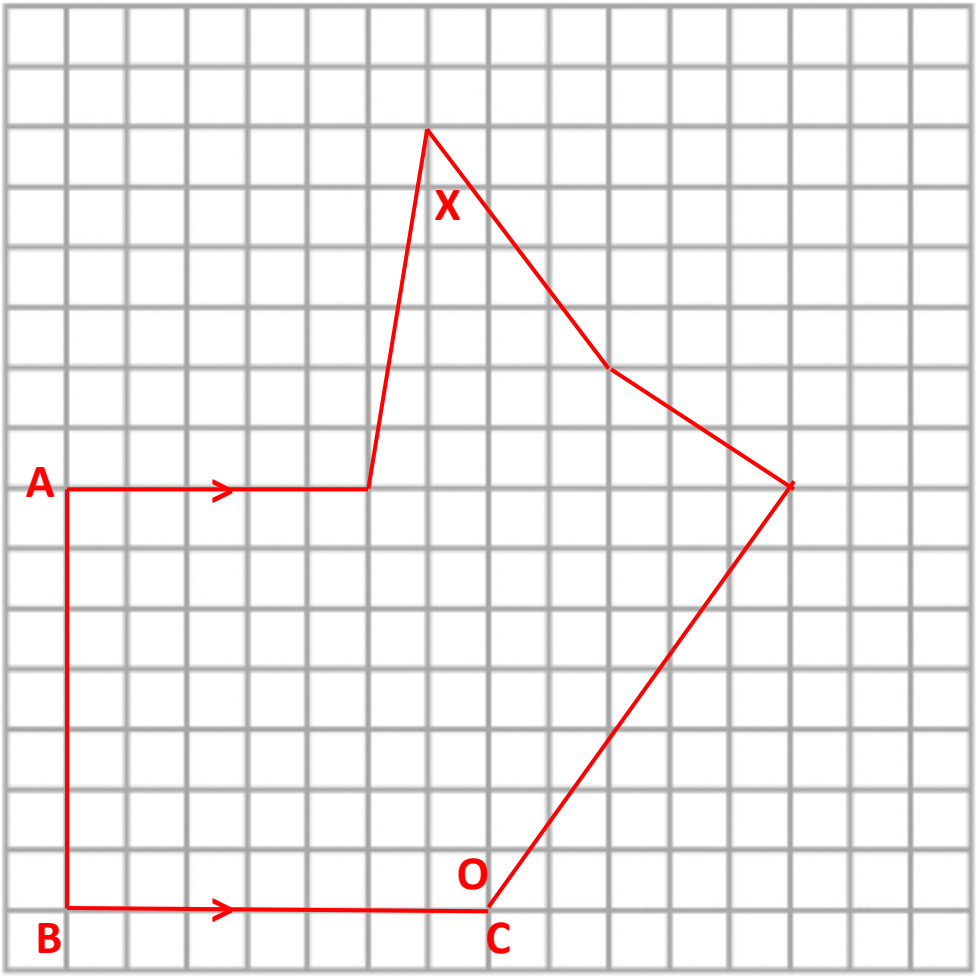
16.

(i) 1 pair of parallel sides. Indicate the lines with the appropriate symbol. **(1 mark)**

(ii) Has an angle smaller than a right angle. Label this angle 'X' **(1 mark)**

(iii) Has an angle greater than a right angle. Label this angle 'O' **(1 mark)**

(iv) 1 pair of perpendicular lines. Label these lines AB and BC **(1 mark)**



The above is only 1 possible answer. There are many varying possibilities of correct answers.

17.

Movement	Minute Hand	Hour Hand
	5	**8**
		11
	11	

(4 marks)

Revision Test 32

Topics covered: Geometric patterns **Time: 30 minutes**

Maximum Mark: 42 **Your Mark: _____**

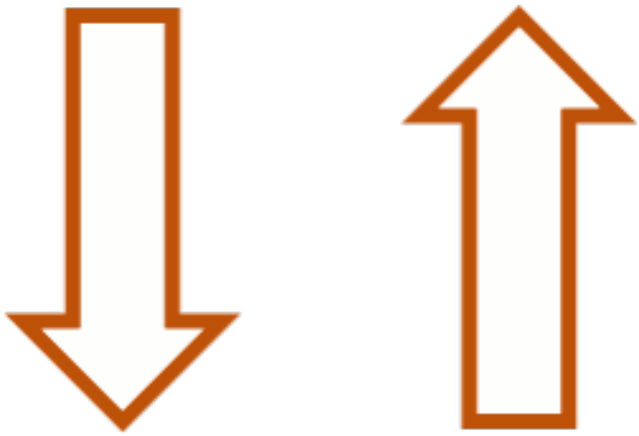
1.

a)

Answer Each arrow in the pattern moved half turn.

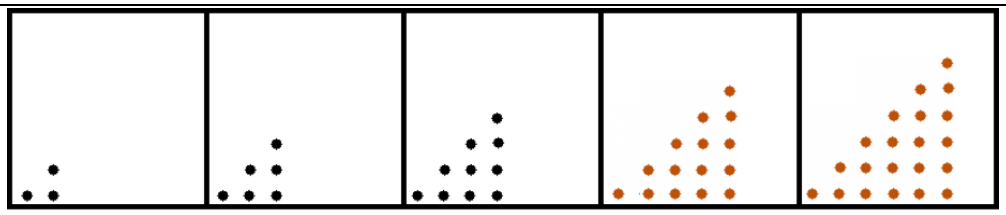
_____ **(2 marks)**

b)



(2 marks)

2.



a)

(2 marks)

b)

Term	1	2	3	4	5	6	7	8	9	**10**
Dots	3	6	10	15	21	28	36	45	55	**66**
	+3	+4	+5	+6	+7	+8	+9	+10	+11	

Answer 66 **(1 mark)**

c)

Answer The pattern is increasing because the first box has 3 dots and the dots in each box after increased by an increasing amount. *(These numbers are also considered triangle numbers and is an acceptable response.)*

_____ **(1 mark)**

3. Observe the pattern below and answer the questions that follow.

a)

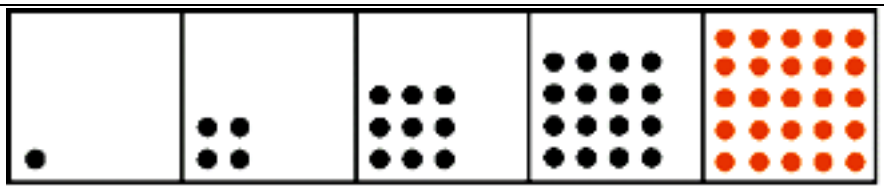
(2 marks)

b)

Answer The pattern is repeating since the first term and second term are constantly duplicated throughout the pattern.

_____ **(1 mark)**

4.



a)

(2 marks)

b)

The number of dots in each term is equal to the square of the term.

$$10th\ term = 10^2 = 10 \times 10 = 100$$

Answer 100 **(1 mark)**

c)

Answer The pattern is an increasing pattern because the number of dots in each term is equal to the square of the term. Therefore, as the terms increase, the square of the terms will also increase and thus the number of dots in each consecutive term will increase.

_____ **(1 mark)**

5.

Answer Rendell's answer is not correct as the terms are not constantly repeated. From the pattern it can be seen that there are two rectangles followed by a trapezium in the first term, which is repeated as the second and fourth term. However, in the third term there are three rectangles before the trapezium opposed to two rectangles which obstructs the **(3 marks)**

repeating pattern. Therefore, the pattern Rendell drew is not a repeating pattern.

6.

a)

Answer The pattern drawn is an increasing pattern because the number of squares after each cube is increased by one from the previous term.

--- **(1 mark)**

b)

Answer The pattern rule is adding one more square after each cube to the number of squares in the previous term.

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.

--- **(1 mark)**

c)

(2 marks)

7.

a)

Answer The pattern is decreasing as the number of sides in each term is decreasing by two sides from that of the previous term.

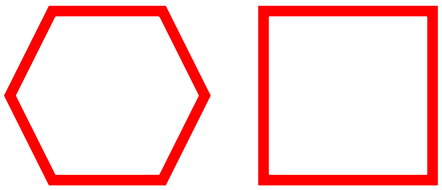
_____ **(1 mark)**

b)

Answer The pattern rule is forming a regular polygon with the number of sides that is 2 less than the previous shape.

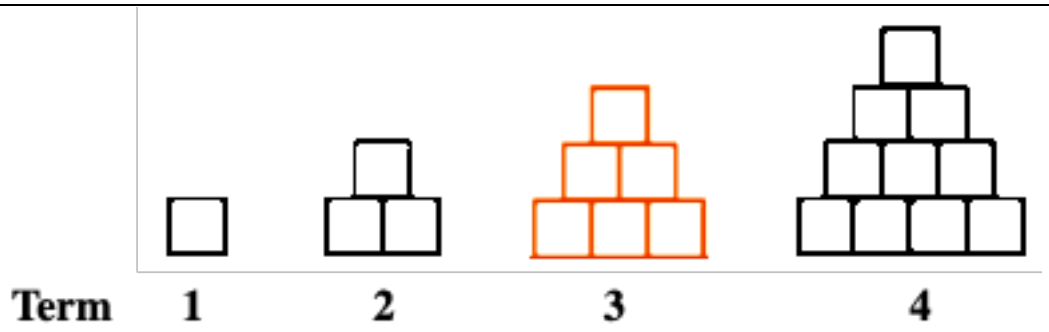
_____ **(1 mark)**

c)



(2 marks)

8.



a)

(1 mark)

b)

Answer To determine the third term of the pattern I simply removed the last row of squares from the fourth term. I did this because in each term **(2 marks)**

a new row of squares was added to the previous term with one square more to the row than the previous.

---

c)

Answer 21 **(1 mark)**

9.

a)

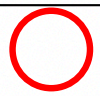
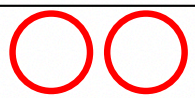
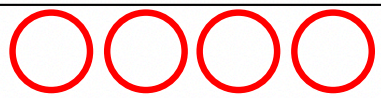
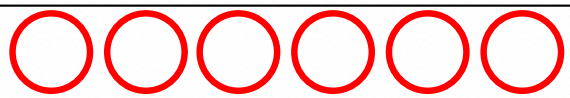
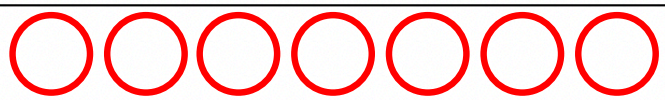
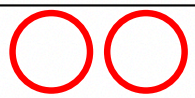
(2 marks)

b)

Answer This pattern is a repeating pattern because in every term there are two squares followed by one triangle which is repeated three more times to complete the pattern which has 4 terms that represent the 12 weeks of Renesh's attendance.

(2 marks)

10. a)

Term	Pattern
1	
2	
3	
4	
5	
6	
7	
8	

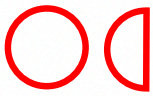
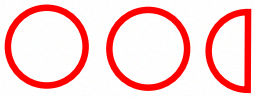
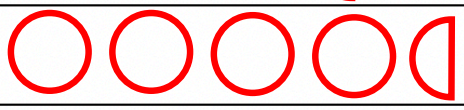
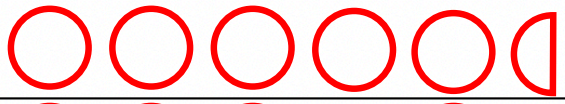
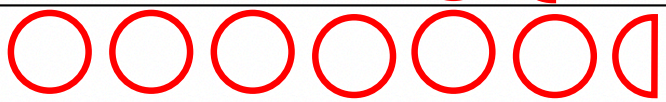
KEY:  = 2 cookies **(3 marks)**

b)

Answer 60 **(1 mark)**

11.

a)

Week	Pattern
1	
2	
3	
4	
5	
6	

KEY:  = 10 runs **(3 marks)**

b)

Answer Yes, Bradley did achieve his goal. Bradley crossed 50 runs on the sisth week, thus, exceeding the outcome he worked towards.

_____ **(1 mark)**

Revision Test 33

Topics covered: Representation and analysis of data **Time: 40 minutes**

Maximum Mark: 44 **Your Mark: _____**

1.

Answer A frequency table shows the number of occurrences of various outcomes from raw data. It is represented in rows and columns.

Some advantages of Frequency Tables are:

a) they are easy to read and identify the mode

b) they are precise and show all data

c) can represent a set of intervals.

Some disadvantages are:

a) can be tedious to organize data,

b) difficult to see patterns and show proportions of categories.

_____ **(4 marks)**

2.

Answer A tally chart is a table that represents the frequencies of various outcomes by vertical and diagonal strokes.

Some advantages of representing data in tally tables are: **(4 marks)**

a) they are easy to read and identify the mode (easier than frequency table)

b) they are precise and show all data

c) can represent a set of intervals

d) easier to see patterns compared to frequency tables

e) easy to identify proportions.

A disadvantage is that tally tables can be tedious to organize data (but less tedious than frequency tables).

3.

Answer A bar chart displays data with rectangular bars equivalent to the values that they represent between a vertical and horizontal axis.

Some advantages of representing data on a bar chart are:

a) easy to compare between categories and identify patterns

b) easy to interpret and analyze data using intervals.

c) easy to identify the mode.

Some disadvantages of representing data on a bar chart are:

a) the total value represented by the chart is not known and must be calculated

(4 marks)

b) may be difficult to interpret and interpretations can be subjective

c) in depth analysis (fraction, percentages etc.) may require additional work (multi-step procedures)

4.

Answer A block chart represents data using blocks where each block represents a certain quantity.

Some advantages of representing data on a block chart are:

a) easy to compare between categories and identify proportions

b) can represent a large amount of data easily

c) easy to identify the mode and patterns

d) simple to look at.

Some disadvantages of representing data on a block chart are:

a) the total value represented by the chart is not known and must be calculated

b) may be difficult to interpret and interpretations can be subjective

c) in depth analysis (fraction, percentages etc.) may require additional work (multi-step procedures)

d) require a key to identify the quantity each block represents.

(4 marks)

5.

Answer A pictograph represents data using symbols that can be relevant to the data. Each symbol represents a certain quantity.

Some advantages of representing data using a pictograph are:

a) easy to compare between categories and identify proportions
b) can represent a large amount of data easily
c) easy to identify the mode and patterns
d) simple to look at.

Some disadvantages of representing data using a pictograph are:

a) the total value represented by the chart is not known and must be calculated
b) may be difficult to interpret and interpretations can be subjective
c) in depth analysis (fraction, percentages etc.) may require additional work (multi-step procedures)
d) require a key to identify the symbol and the quantity it represents
e) difficult to determine values of partial icons

(4 marks)

6.

a)

Month	Frequency	Tally
Jan	6	𝍸 |
Feb	7	𝍸 ||
Mar	10	𝍸 𝍸
Apr	7	𝍸 ||
May	8	𝍸 |||
Jun	4	||||

(2 marks)

b)

Answer I think it is more effective to represent the data using a bar chart as it is easier to look at and understand. The mode can also be easily identified. Bar graphs also allow for easier interpretations than tally charts, as proportions and patterns between categories are easier to identify.

(2 marks)

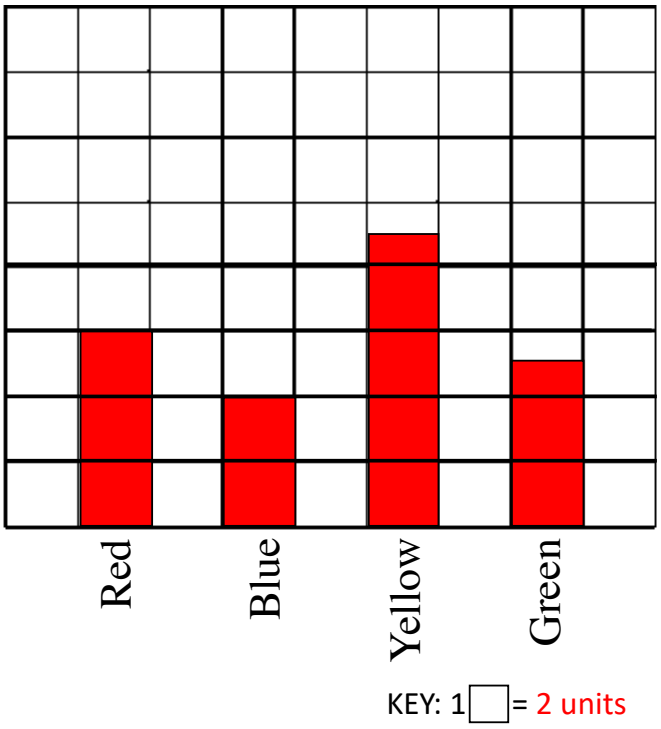
7.

a)

Color	Frequency	Tally
Red	6	𝍸 |
Blue	4	𝍸
Yellow	9	𝍸 𝍸
Green	5	𝍸

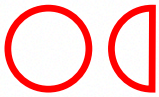
(2 marks)

b)



(2 marks)

8. a)

Safiyah	
Shamila	
Sharon	
Shenelle	

KEY:  = 4 phone calls

(2 marks)

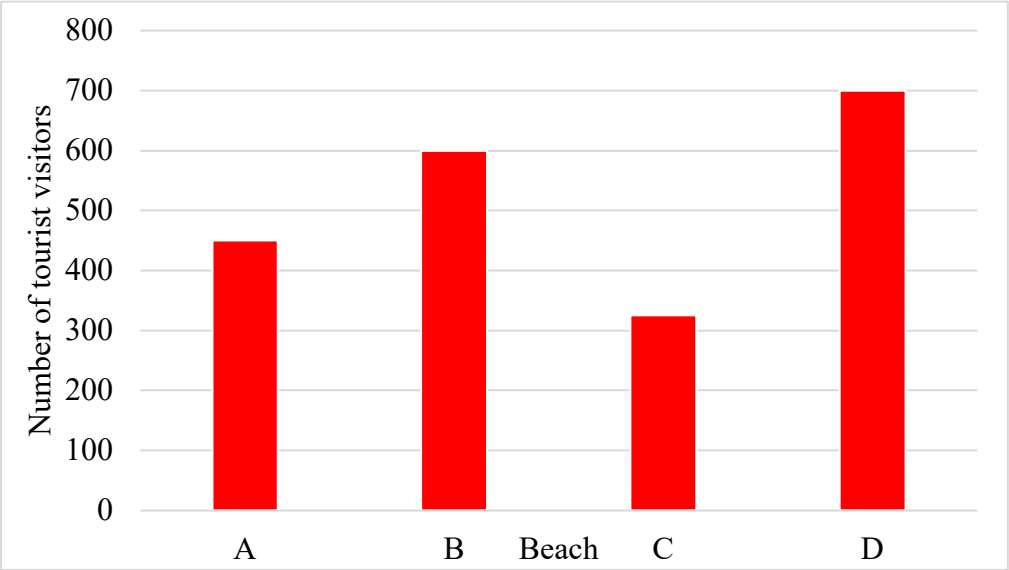
b)

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

_____ **(2 marks)**

9.

a)



(2 marks)

b)

Answer I think beach C should be beautified first. The least number of tourists visited beach C (350) compared to the other beaches. Therefore, if the beach is beautified tourists may want to visit.

The Ministry of Tourism should ensure that the beach and its environment are kept clean. Additionally, the Ministry of Tourism should plant trees and other plants to beautify the beach.

Both of these initiatives may attract more tourists because they will make the beach and its surroundings seem more inviting.

(2 marks)

10. a)

Answer Yes, I believe that Terrance's mother is being successful because even though for the first four tests his performance was inconsistent, in the last five tests, Terrance's marks increased drastically as the number of questions he got incorrect decreased drastically.

(2 marks)

b)

Answer No, I do not believe that Yona deserved the prize for the most improved student. I believe Terrance deserved the prize more since his marks consistently improved, over the last five tests. However, Yona's marks are inconsistent and there is no evidence of improvement over the eight tests.

(2 marks)

11. a)

Answer Pictograph **(1 mark)**

b)

Name	Mark
Amy	60
Bella	80
Neil	60
Steve	50

(3 marks)

Revision Test 34

Topics covered: Mode and mean **Time: 50 minutes**

Maximum Mark: 70 **Your Mark: _____**

1. Answer 7	**(1 mark)**
2. Answer 2	**(1 mark)**
3. Answer 6	**(1 mark)**
4. Answer $21.634kg$ *or* $21\ 634g$	**(2 marks)**
5. a) Answer 4 b) Answer 6 $fishes$	**(1 mark)** **(2 marks)**
6. Answer 17	**(2 marks)**
7. Answer $9kg$	**(2 marks)**
8. a)	

	Answer $5\ marks$	**(1 mark)**
	b) Answer $5\ marks$	**(2 marks)**
9.	a) Answer 85%	**(1 mark)**
	a) Answer 90%	**(2 marks)**
10.	Answer 22	**(2 marks)**
11.	Answer 112	**(1 mark)**
12.	a) Answer $8\ children$	**(1 mark)**
	b) Answer $38\ students$	**(3 marks)**
13.	a) Answer 82%	**(2 marks)**
	b) Answer $24\ marks$	**(2 marks)**

14.

a)

Answer *Jake and Ishmael scored 17 which is the mean score.* **(2 marks)**

b)

Answer I believe Coach Miller should choose Zack to be added to the team. I think Zack should be chosen because he scored the highest of all the players represented on the bar chart. Therefore, he is the best player and should be chosen.

_____ **(2 marks)**

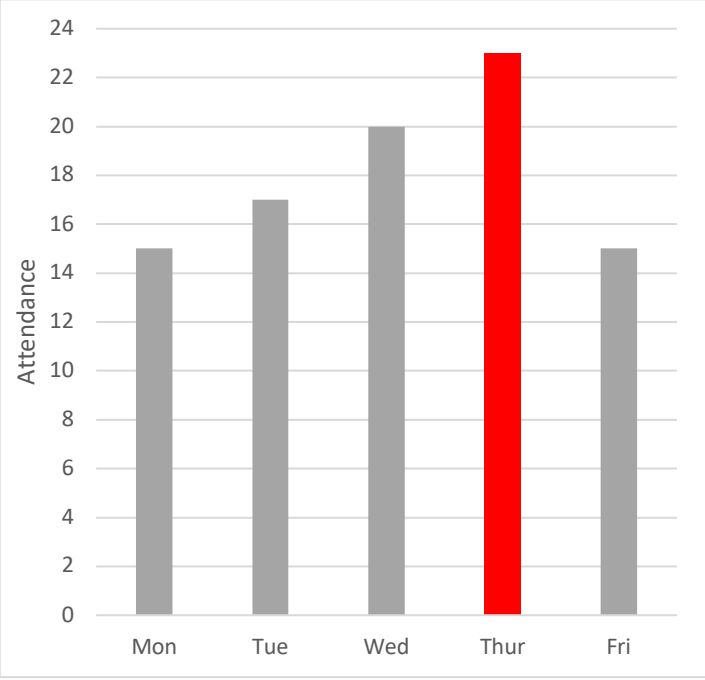
15.

Answer 91% **(3 marks)**

16.

Answer $500 **(3 marks)**

17.



a) Answer 23 b) Answer 15 *students*	**(3 marks)** **(1 mark)**
18. Answer $6.86	**(3 marks)**
19. Answer 48	**(2 marks)**
20. a) Answer 34 b) Answer 64 c) Answer 8	**(2 marks)** **(1 mark)** **(1 mark)**
21. Answer 15	**(2 marks)**
22. Answer 81	**(2 marks)**
23. Answer 0	**(2 marks)**

24.

Flavor	Number of students	Tally
Coconut	9	
Chocolate	11	
Vanilla	10	

a)

10 **(1 mark)**

b)

Answer 1 *more* **(1 mark)**

c)

Answer 10 **(2 marks)**

25.

Points	Frequency	Tally	Total points
2	7		14
5	**4**		20
6	**6**		36
10	3		30

a)

(2 marks)

	b) Answer 5	**(2 marks)**
26.	Answer $23, 23, 28$	**(4 marks)**
27.	Answer 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. _____	**(4 marks)**