

Name: \_\_\_\_\_

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**ENVISION TUITION 11+ SKILLS  
BOOKLET**  
**WWW.ENVISIONTUITION.COM**

**Date:** \_\_\_\_\_

**Time:**

**Total marks available: 188**

**Total marks achieved: \_\_\_\_\_**

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THIS IS A BOOKLET FOR PRACTICING CONTENT AND EXAM TECHNIQUE FOR  
THE 11 PLUS EXAM.

**ENVISION TUITION - NIC GARCIA**

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## Questions

Q1.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

Calculate

$$26 + 37 + 14$$

49

67

77

79

(Total for question = 1 mark)

Q2.

Calculate

$$3408 \times 16$$

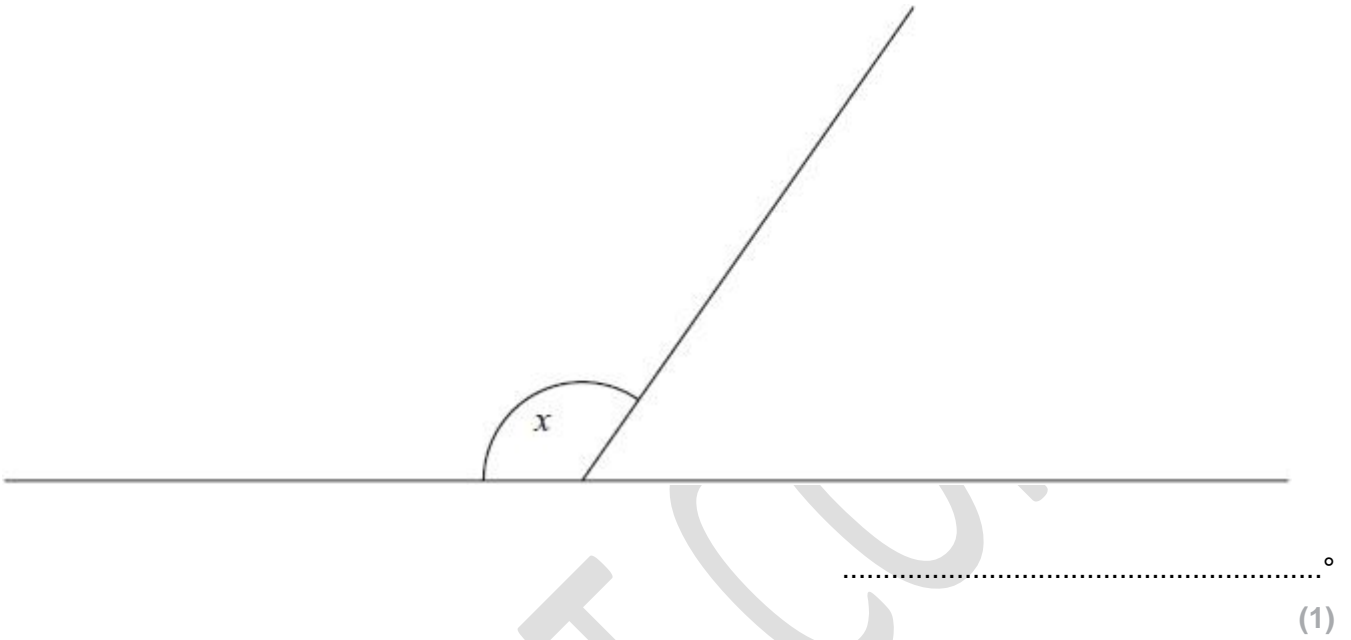
You must show your working.

.....

(Total for question = 2 marks)

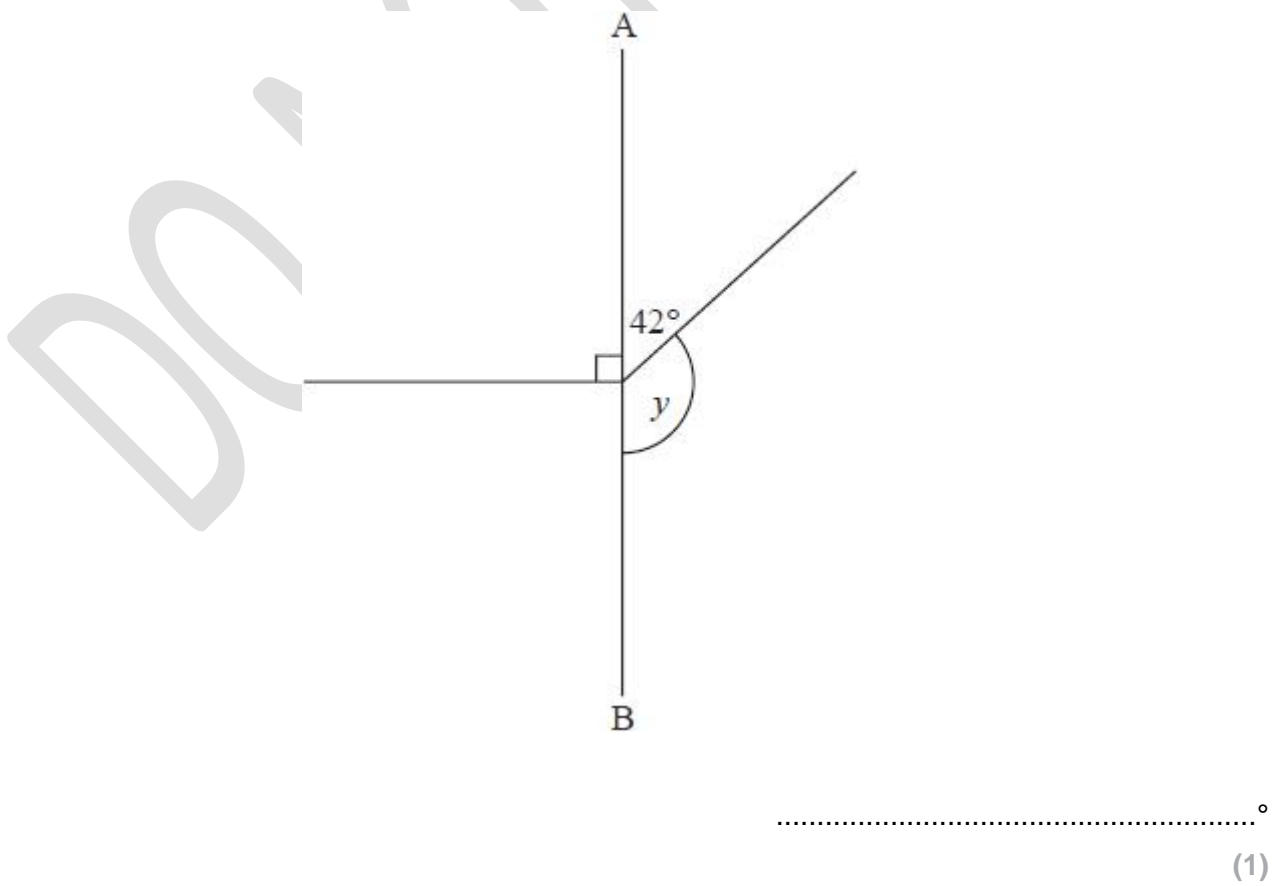
**Q3.**

(a) Measure the size of angle  $x$

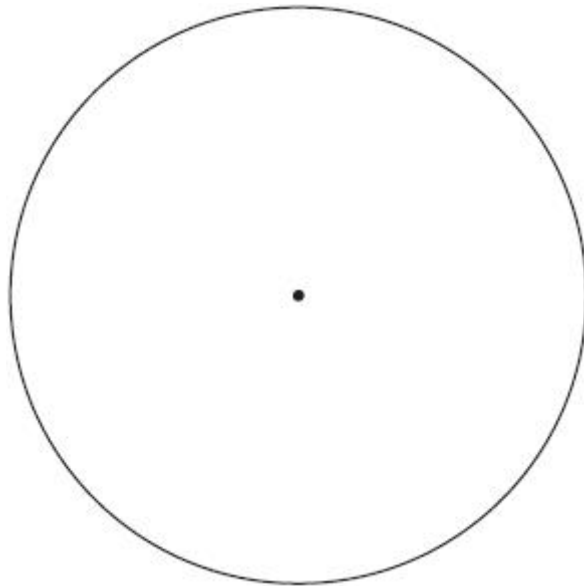


(b) AB is a straight line.

Work out the size of angle  $y$

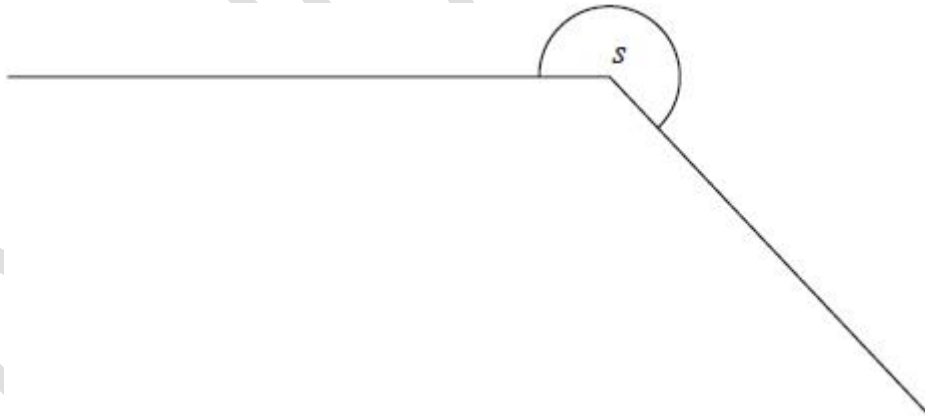


(c) Draw a diameter on the circle below.



(1)

(d) Write the word that describes angle  $s$



.....  
(1)

**(Total for question = 4 marks)**

**Q4.**

Here is a distance chart.

All distances are given in kilometres.

New Town					
42	Greenville				
230	249	Sugar Top			
212	230	60	Sun City		
191	210	122	69	Water Bay	
224	243	38	24	96	Bridge Town

It is 42 km from New Town to Greenville.

(a) How far is it from Greenville to Sugar Top?

..... km  
(1)

(b) Yusuf drives from Sun City to New Town.

He stops after 60 km to get fuel.  
How much further does he have to travel?

..... km  
(2)

**(Total for question = 3 marks)**

**Q5.**

Esme writes this number sequence.

1, 4, 7, 10, 13, .....

(a) What is the term to term rule for Esme's number sequence?

.....  
(1)

(b) The  $n$ th term of Esme's number sequence is  $3n - 2$

What will the 15<sup>th</sup> term be?

.....  
(1)

**(Total for question = 2 marks)**

**Q6.**

Answer the question with a cross in the box you think is correct  . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross  .

Calculate

$\frac{2}{3}$  of 1650

550

825

1100

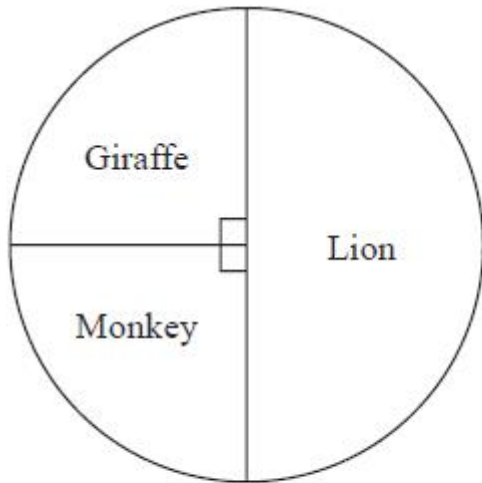
2475

**(Total for question = 1 mark)**

**Q7.**

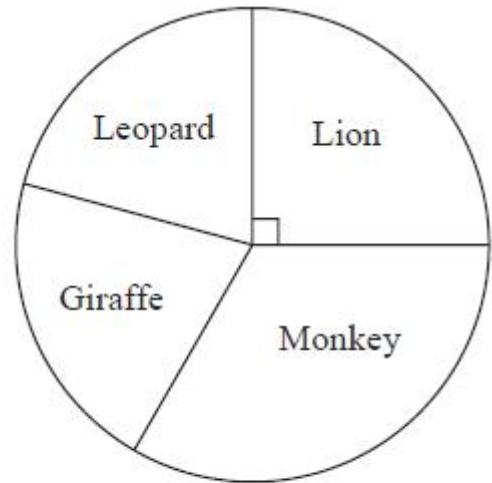
Jess did a survey of animals registered at two wildlife parks.

She presented her results in these two pie charts.



**Sunny Hills Wildlife Park**

**120 animals**



**Long Ridge Wildlife Park**

**240 animals**

(a) Jess says

*"There are more lions at Sunny Hills Wildlife Park than there are at Long Ridge Wildlife Park."*

Is Jess correct?

Yes

No

Explain how you know.

.....

(2)

$\frac{1}{3}$  of the animals at Long Ridge Wildlife Park are monkeys. There are the same number of leopards as there are giraffes at Long Ridge Wildlife Park.

(b) How many giraffes are there at Long Ridge Wildlife Park? You must show your working.

..... giraffes

(3)

**(Total for question = 5 marks)**

**Q8.**

Calculate

$$2536 \times 23$$

You must show your working.

.....

**(Total for question = 2 marks)**

**Q9.** Calculate

$$375 \div 4$$

You must show your working.

.....

**(Total for question = 2 marks)**

**Q10.**

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

Calculate

$$4.55 + 2.71$$

1.84

2.24

6.126

7.26

**(Total for question = 1 mark)**



Q11.

Answer the question with a cross in the box you think is correct  . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross  .

Calculate

40% of 180

18

45

72

108

(Total for question = 1 mark)

Q12.

Answer the question with a cross in the box you think is correct  . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross  .

Calculate

43.4 - 2.03

23.1

41.37

41.43

45.43

(Total for question = 1 mark)

Q13.

Answer the question with a cross in the box you think is correct  . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross  .

Calculate

$$4a + 3b - c$$

when  $a = 2$ ,  $b = 3$ ,  $c = 7$

5

10

68

75

(Total for question = 1 mark)

Q14.

Expand and simplify

$$2(x - 3y) + 3(x + 3y)$$

.....

(2)

(b) Solve

$$3a - 5 = 4$$

$a =$  .....

(1)

(Total for question = 3 marks)

**Q15.**

Calculate

(a)  $\frac{1}{2} + \frac{3}{4}$

.....  
(1)

(b)  $\frac{1}{3} \times \frac{1}{4}$

.....  
(1)

(c)  $\frac{1}{5} \div 2$

.....  
(1)

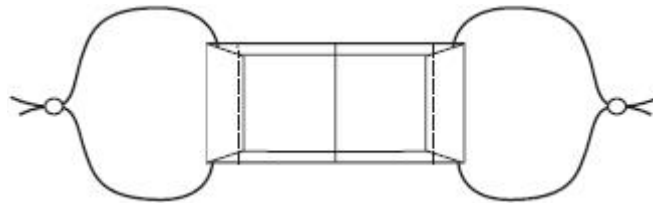
**(Total for question = 3 marks)**

**Q16.**

Matilda is making face coverings.

Each face covering requires 3 layers of fabric.

Each layer requires a rectangle of fabric 20 cm × 15 cm.



Fabric comes in  $1\text{ m} \times \frac{1}{2}\text{ m}$  sheets.

Matilda wants to make 20 face coverings.

How many sheets of fabric will she need?

You must show **all** your working.

..... sheets

**(Total for question = 3 marks)**

**Q17.**

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

Choose the word that can be used to describe the number

16

Odd

Prime

Cube

Square

**(Total for question = 1 mark)**

**Q18.**

Circle all of the **square numbers**.

9                      27  
35  
25  
140                      101  
81  
8                      36                      50

**(Total for question = 2 marks)**

**Q19.**

Complete the boxes to make these fractions equivalent.

(a)  $\frac{2}{5} = \frac{\square}{10}$  (1)

(b)  $\frac{2}{\square} = \frac{16}{24}$  (1)

**(Total for question = 2 marks)**

**Q20.**

Dion's class collected data about whether they go straight home from school or stay for the after-school club.

There are 27 students in Dion's class.

14 are girls.

8 boys go straight home.

7 girls go to the after-school club.

(a) Insert the given information into the shaded sections of this table.

(1)

	Straight home	After-school club	Total
Girls			
Boys			
Total			27

(b) Complete the table.

(2)







**(Total for question = 3 marks)**

**Q21.**

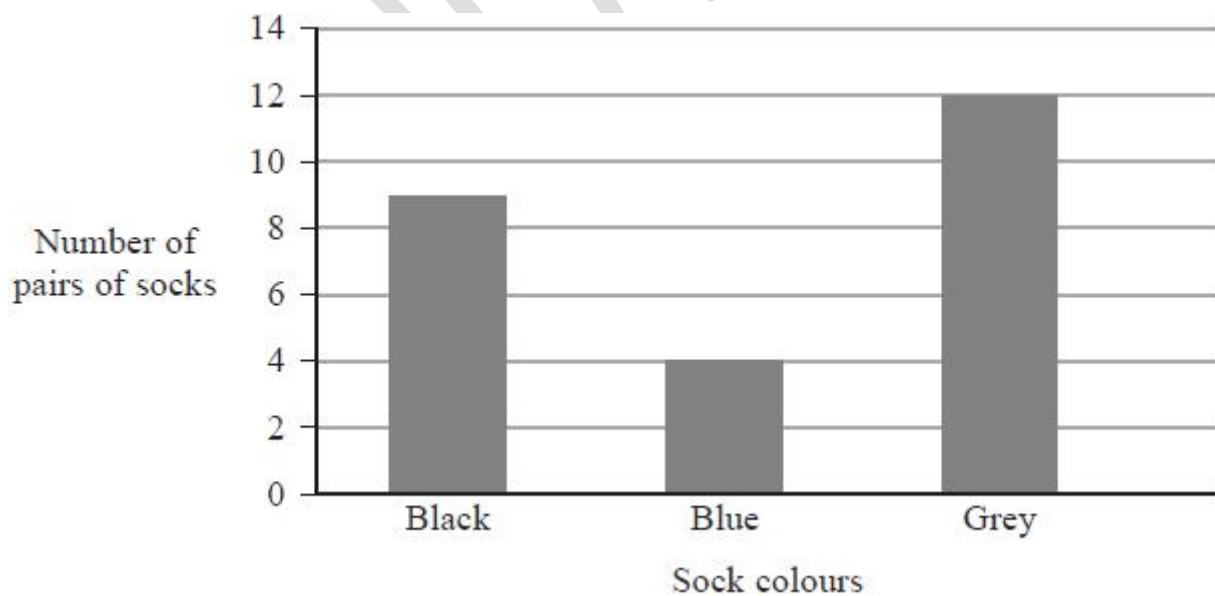
Caleb made a tally chart of his sock colours and used it to create a bar chart.

He spilled a drink on the tally chart and part of it now cannot be read.

Caleb had 25 pairs of socks.

Sock colour	Tally	Total
Black		
Blue		
Grey		

Complete the tally chart with the missing information from the bar chart below.



**(Total for question = 2 marks)**

**Q22.**

This tally chart shows the favourite colours of the students in Jai's class.

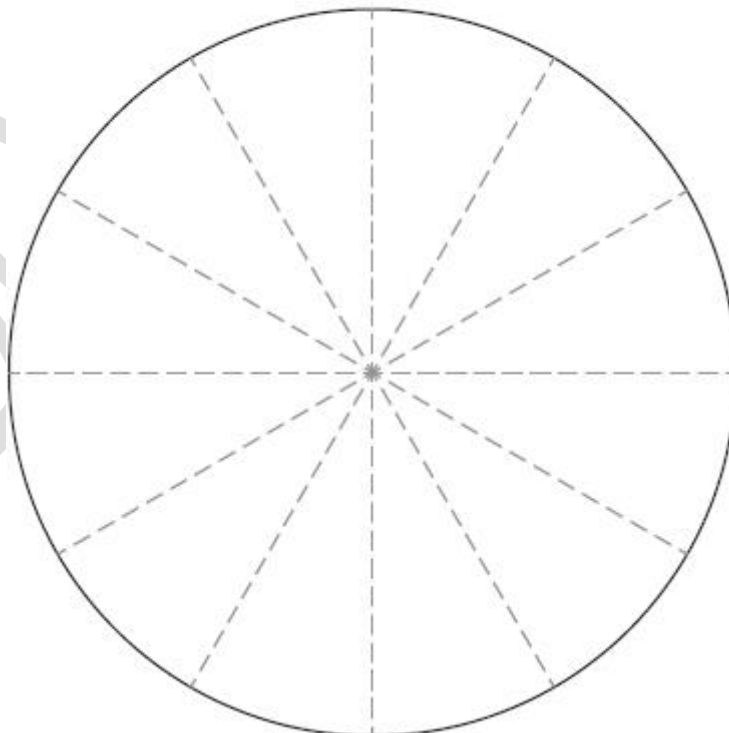
Colour	Tally	Total
Red		4
Yellow		
Green		3
Blue		6
Purple		

(a) Complete the tally chart.

(2)

(b) Use the information from the tally chart to complete this pie chart.

**Favourite colours**



(3)

**(Total for question = 5 marks)**



**Q23.**

Mr Jones asked his students what their favourite sport was. He displayed their answers in this tally chart.

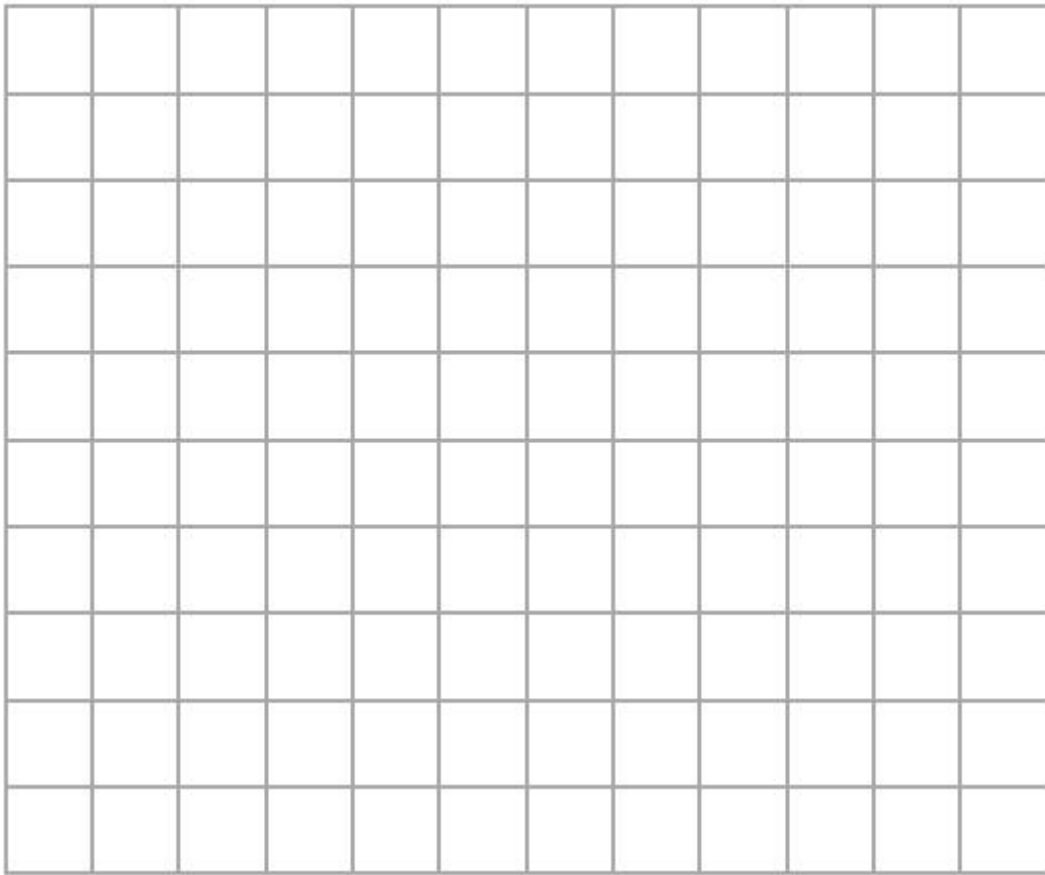
Sport	Tally	Total
Swimming	/	
Football		3
Running	/	
Hockey		

(a) Complete the tally chart for this data.

(1)

(b) Construct a bar chart to represent this data.

Bar chart of favourite sports



(3)

(Total for question = 4 marks)

**Q24.**

Zain left his house at **07:25**

It took him 5 minutes to walk to the bus stop.

He waited 12 minutes for the bus to arrive.

The bus journey took 19 minutes to get to school.

Zain's school day begins at **08:00**

Did Zain arrive at school on time?

Yes

No

Explain how you know.

.....

.....

.....

**(Total for question = 2 marks)**

Q25.

Answer the question with a cross in the box you think is correct  . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross  .

Expand this expression

$$4(x + 3y)$$

$4x + 3y$

$4x + 7y$

$12x + y$

$4x + 12y$

(Total for question = 1 mark)

Q26. Here is a triangular prism.



(a) How many faces does it have?

.....

(1)

(b) How many vertices does it have?

.....

(1)

(c) How many edges does it have?

.....

(1)

(Total for question = 3 marks)

**Q27.**

(a) List all of the factors of 48

.....

(2)

(b) What is the highest common factor (HCF) of 48 and 18?

.....

(1)

(c) Write 48 as the product of its prime factors.

.....

(1)

**(Total for question = 4 marks)**

**Q28.**

What is 32% of 150?

.....

**(Total for question = 2 marks)**

**Q29.**

(a) The  $n$ th term of a number sequence is  $4n - 3$

Find the 20th term of the sequence.

(b) Expand and simplify

$$2(3a + b) + 3(a - 3b)$$

.....  
(1)

(c) Solve

$$7y - 5 = 23$$

.....  
(2)

$$y = .....$$

(1)

**(Total for question = 4 marks)**

**Q30.**

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

Find the value of the expression

$$8a + 5b$$

when  $a = 4$  and  $b = 6$

62

88

114

140

(Total for question = 1 mark)

**Q31.**

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

Work out

$$3^2 + (17 - 8) \times 4 - 3$$

-9

18

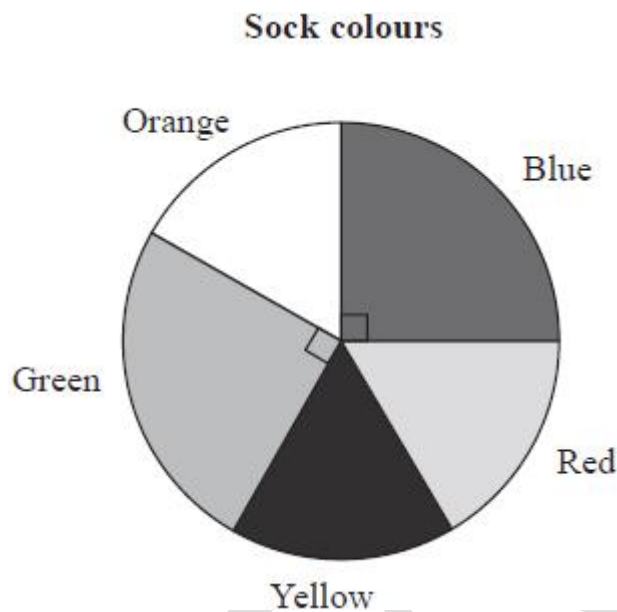
42

69

(Total for question = 1 mark)

**Q32.**

The pie chart shows the sock colour of the 24 students in Class 6.



Red socks, yellow socks and orange socks were each worn by the same number of students.

How many students wore orange socks?

.....

**(Total for question = 2 marks)**

**Q33.**

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

Lexie and Paul have \$420  
They share it in the ratio 4:3  
How much does Lexie receive?

\$60

\$105

\$180

\$240

**(Total for question = 1 mark)**



**Q34.**

Here are the numbers of hours of music played by a radio station on each day of last week.

15      10      14      6      8      9      15

(a) What is the median number of hours?

.....  
(1)

(b) What is the mean number of hours?

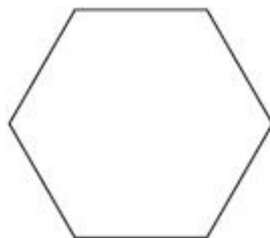
.....  
(1)

**(Total for question = 2 marks)**

**Q35.**

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

How many lines of symmetry does this regular hexagon have?



1

3

4

6

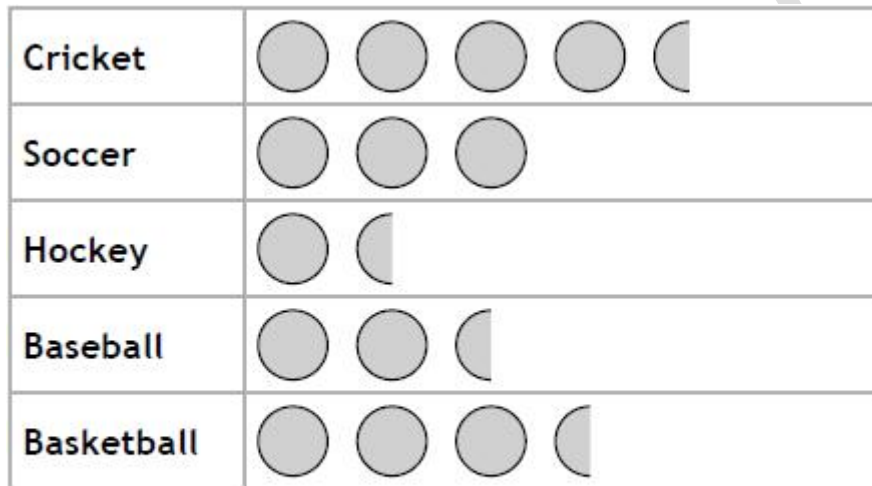
**(Total for question = 1 mark)**


**Q36.**

The students in a class completed a questionnaire of their favourite sports.

They presented their results in this pictogram.

**Pictogram of favourite sports**



 = 2 children

How many students chose basketball?

.....

**(Total for question = 1 mark)**

**Q37.**

Sanjay needed some new football kit.

He bought

a football



\$4.69

football boots



\$21.57

football socks



\$3.28

(a) How much did Sanjay spend altogether?

\$ .....

(1)

(b) Sanjay had \$30 to spend on the football kit.

How much change should he receive?

\$ .....

(1)

**(Total for question = 2 marks)**

**Q38.**

Anja and Jai are making some bread.

Anja has 1.25 kg of flour.

Jai has 850 g of flour.

How much flour do they have in total?

Give your answer in kilograms.

You must show your working.

..... kg

**(Total for question = 2 marks)**

**Q39.**

**Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .**

Alice has \$20

She buys a book for \$4.50 and a pen for \$3.99

How much money does Alice have left?

\$8.49

A

\$11.51

B

\$12.51

C

\$16.01

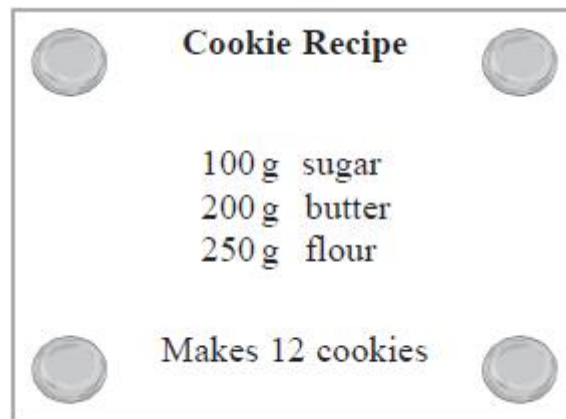
D

**(Total for question = 1 mark)**

**Q40.**

Noor needs to make 30 cookies for the school bake sale.

She is going to use the following recipe.



Noor already has:

200 g of sugar

500 g of butter

500 g of flour

How much more of each ingredient does she require?

Sugar ..... g

Butter ..... g

Flour ..... g

**(Total for question = 3 marks)**

Q41.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

In a sports shop tennis balls cost \$0.66 each.

How much would 3 tennis balls cost?

\$0.22

\$0.99

\$1.32

\$1.98

(Total for question = 1 mark)

Q42.

(a) Circle the fractions that are less than  $\frac{5}{8}$

$\frac{1}{2}$

$\frac{1}{4}$

$\frac{3}{4}$

$\frac{11}{16}$

(1)

(b) Complete these equivalent fractions.

(i)  $\frac{3}{5} = \frac{\boxed{\phantom{000}}}{10}$

(1)

(ii)  $\frac{3}{\boxed{\phantom{000}}} = \frac{\boxed{\phantom{000}}}{12} = \frac{15}{\boxed{\phantom{000}}}$

(2)

(c) Calculate

$$\frac{3}{5} + \frac{1}{3}$$

.....  
(1)

(d) Calculate

$$\frac{2}{3} \times \frac{3}{4}$$

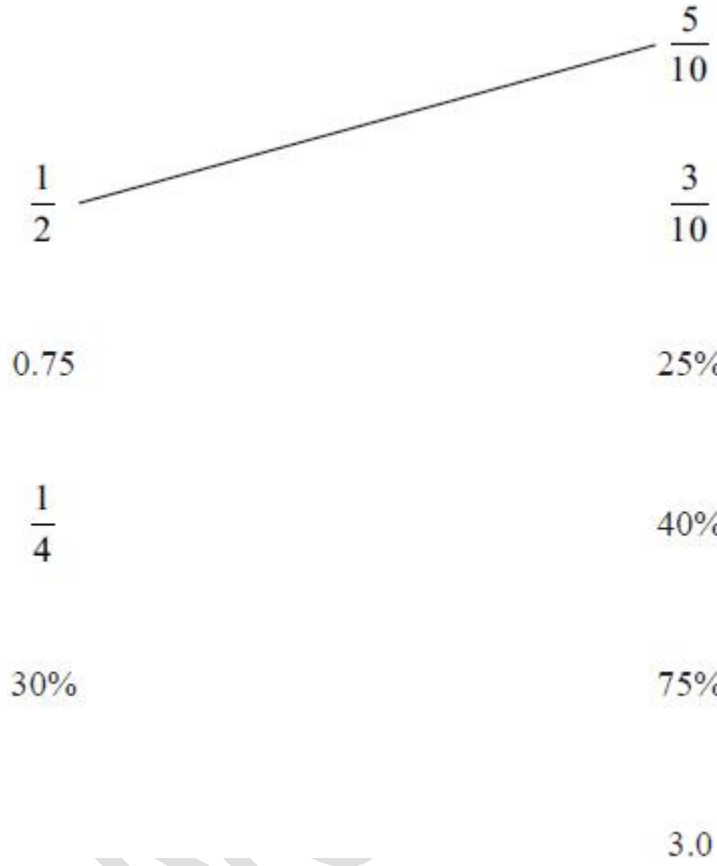
.....  
(1)

**(Total for question = 6 marks)**

**Q43.**

Join the equivalent fractions, decimals and percentages.

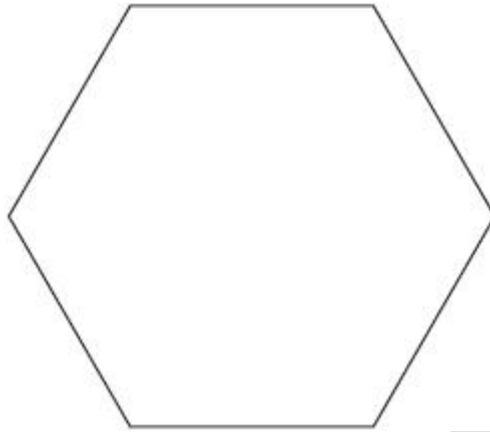
One has been done for you.



**(Total for question = 2 marks)**

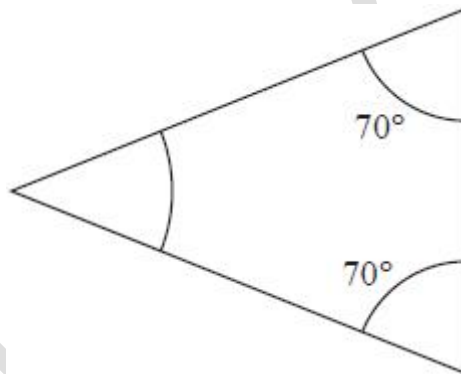


**Q44.** (A) Here is a regular hexagon. Using correct notation, mark one set of parallel lines on the hexagon.



(1)

(b) Here is a triangle.

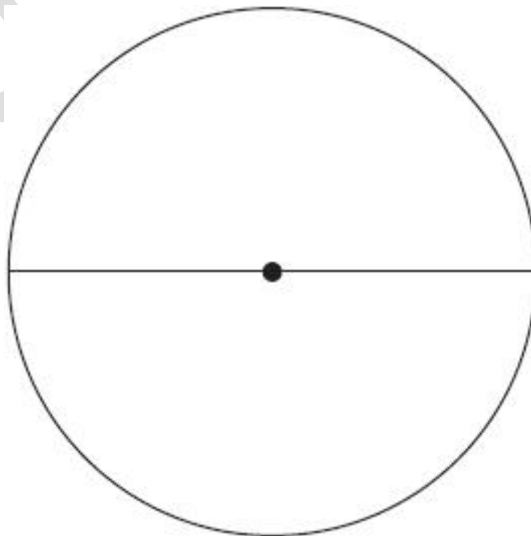


What is the name of this type of triangle?

.....

(1)

(c) A line has been drawn through the centre of this circle.

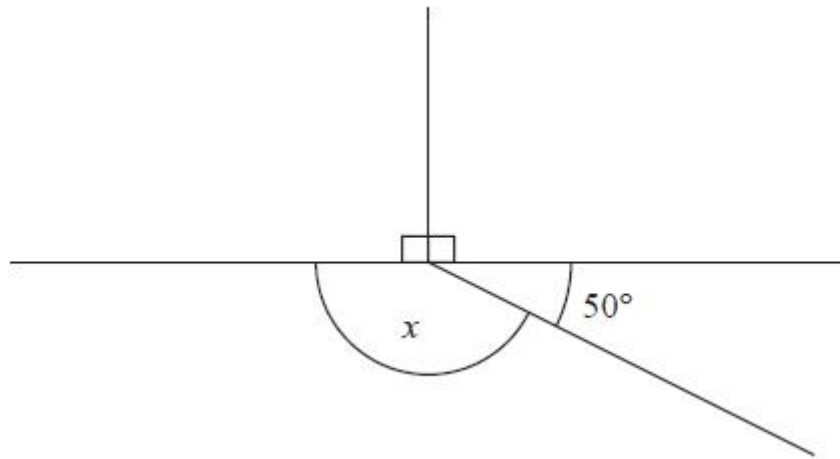


What is the name of this line?

.....

(1)

(d) Work out the size of angle  $x$



$x = \dots\dots\dots^\circ$   
(1)

(Total for question = 4 marks)

**Q45.**

(a) Calculate

$$6 + 3 \times 4$$

$\dots\dots\dots$   
(1)

(b) Calculate

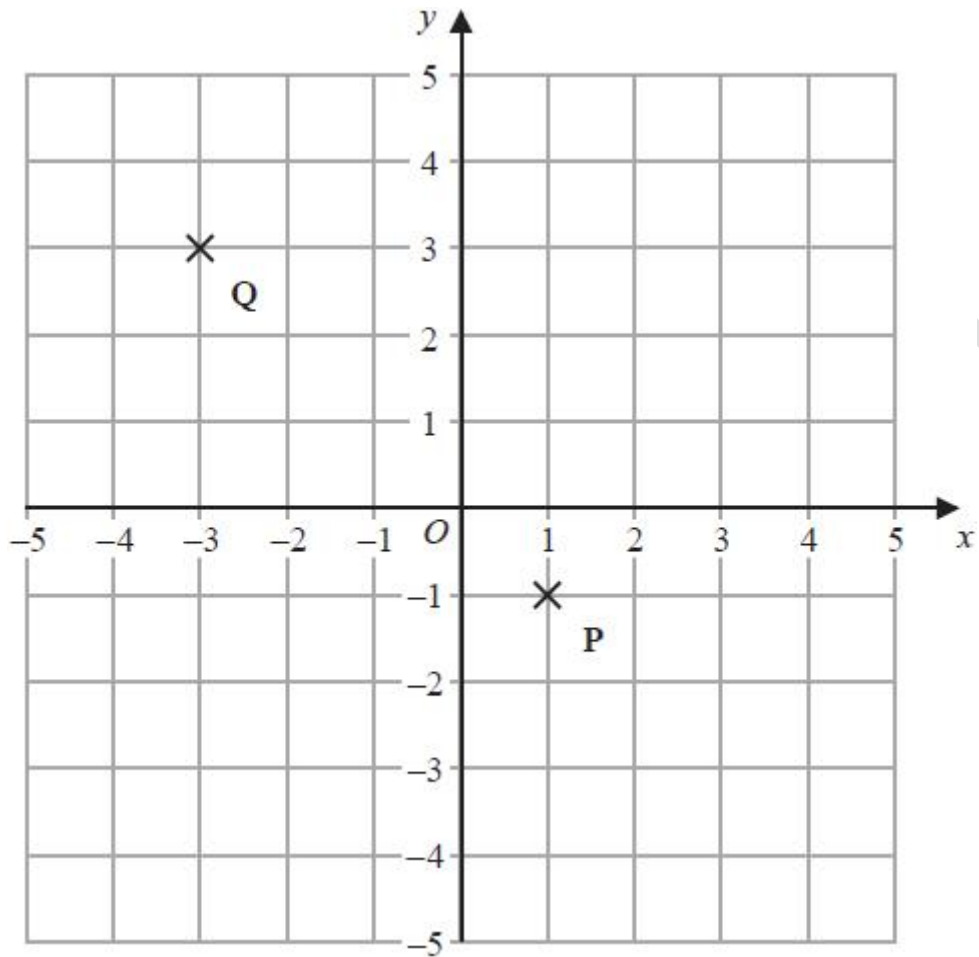
$$21 - (3 \times 5) \div 3$$

$\dots\dots\dots$   
(1)

(Total for question = 2 marks)

**Q46.**

Points P and Q are plotted on the coordinate grid.



(a) Plot point S (3, 1)

(1)

(b) Point R completes the rectangle PQRS.

What are the coordinates of point R?

( ..... , ..... )

(1)

**(Total for question = 2 marks)**

**Q47.**

240 students were asked how they travelled to school.

25% came by car.

30% came by bus.

The remaining students walked to school.

Janine says

*'more than 100 students walked to school'*

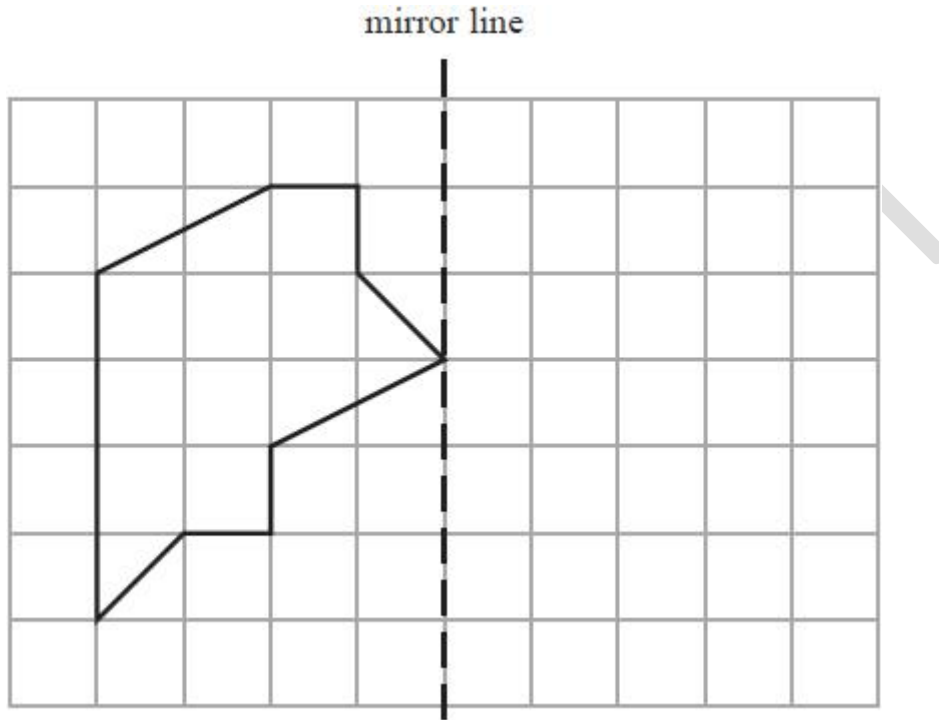
Is Janine correct?

You must show your working.

**(Total for question = 3 marks)**

**Q48.**

(a) Reflect the shape on the grid in the mirror line.



(1)

(b) What is the volume of this cuboid?

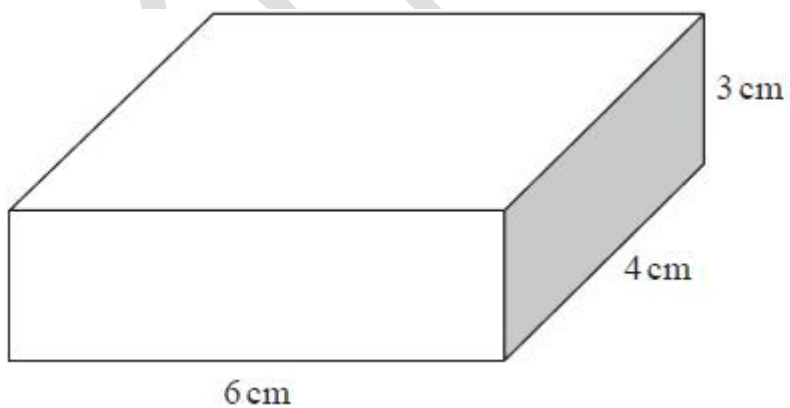


Diagram **NOT** accurately drawn

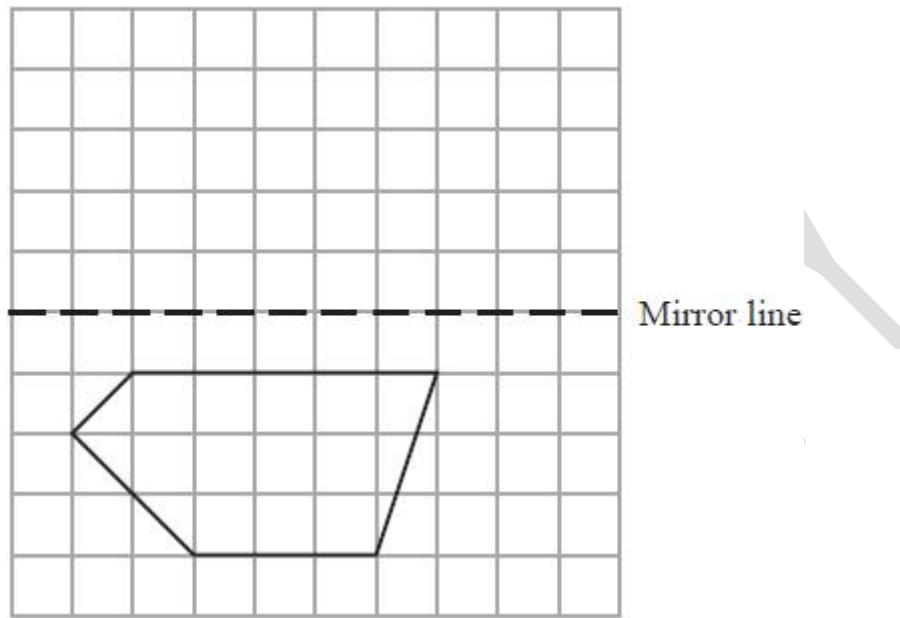
..... cm<sup>3</sup>

(2)

**(Total for question = 3 marks)**

**Q49.**

Reflect this shape in the mirror line.



**(Total for question = 1 mark)**

**Q50.**

(a) Round 36.57 to the nearest whole number.

.....

(1)

(b) Here are four numbers.

3.05      3.5      5.3      0.53

Put these numbers in order, starting with the smallest.

.....

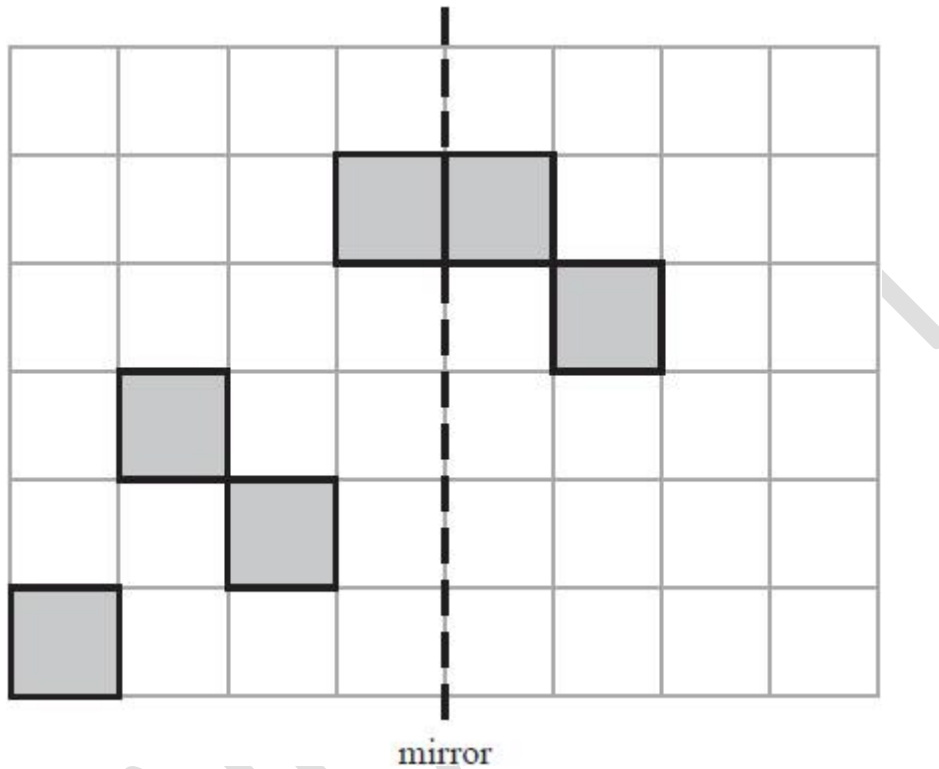
smallest

(1)

**(Total for question = 2 marks)**

Q51.

Shade four squares to make a pattern which is symmetrical about the mirror line.



(Total for question = 1 mark)

Q52.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

Simplify the expression

$$2x + 3y - x - 4y$$

$x - y$

$3x + 7y$

$9xy$

$2 - y$

(Total for question = 1 mark)

Q53.

Answer the question with a cross in the box you think is correct  . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross  .

Simplify this expression

$$3a + 4b - 3b - a$$

$2a + b$

$2a - 7b$

$3ab$

$4a + 7b$

(Total for question = 1 mark)

Q54.

(a) Simplify

$$3a - 4b + a + 2b - 2a$$

.....

(1)

(b) Expand and simplify

$$4(2x - y) + 3(x + 3y)$$

.....



(c) Solve the equation

$$4y + 3 = 19$$

$$y = \dots\dots\dots (1)$$

**(Total for question = 4 marks)**

**Q55.**

Jon left work at 16:45

It took him 10 minutes to walk to the train station.

He waited 7 minutes for the train to leave the station.

The train journey took 18 minutes.

Jon then walked for 5 minutes from the train station to his home.

What time did Jon arrive home?

.....

**(Total for question = 2 marks)**

Q56.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

What 3D shape would be made from this net?



Cube

Cuboid

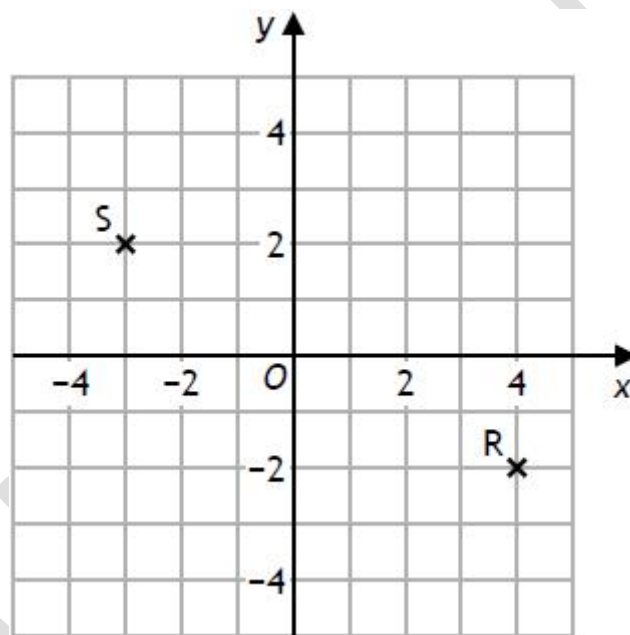
Cylinder

Pyramid

(Total for question = 1 mark)

**Q57.**

R and S are two points plotted on this grid.



(a) What are the coordinates of point R?

.....  
(1)

(b) What are the coordinates of point S?

.....  
(1)

**(Total for question = 2 marks)**

Q58.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

What does the 7 represent in this number?

62.37

Ones

Tens

Hundredths

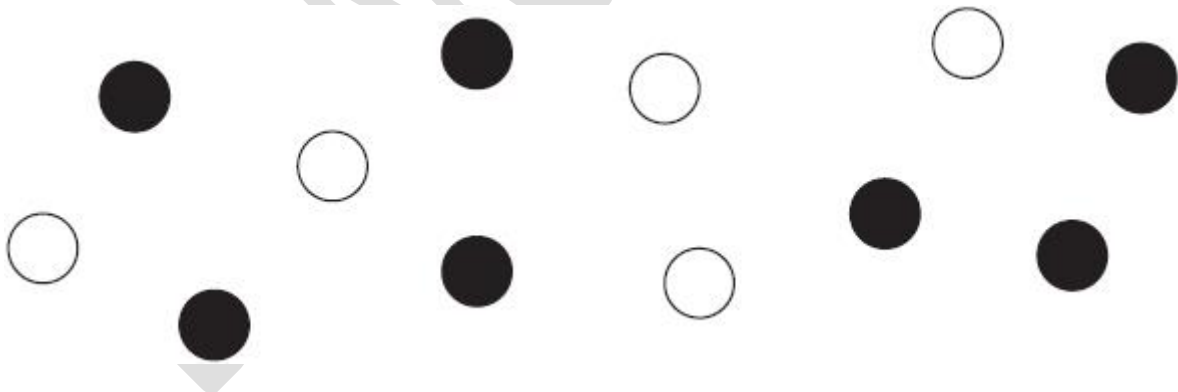
Tenths

(Total for question = 1 mark)

Q59.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

What fraction of these counters have been shaded?



$\frac{5}{7}$

$\frac{5}{12}$

$\frac{7}{12}$

$\frac{7}{5}$

(Total for question = 1 mark)

**Q60.**

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

What is 127 489 rounded to the nearest thousand?

127 000

127 400

127 500

128 000

(Total for question = 1 mark)

**Q61.**

In a school the ratio of children to adults is 5 : 2

There are 112 adults in the school.

How many children are there in the school?

.....  
(Total for question = 2 marks)

**Q62.** Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

What is 3000 m equivalent to?

0.3 km

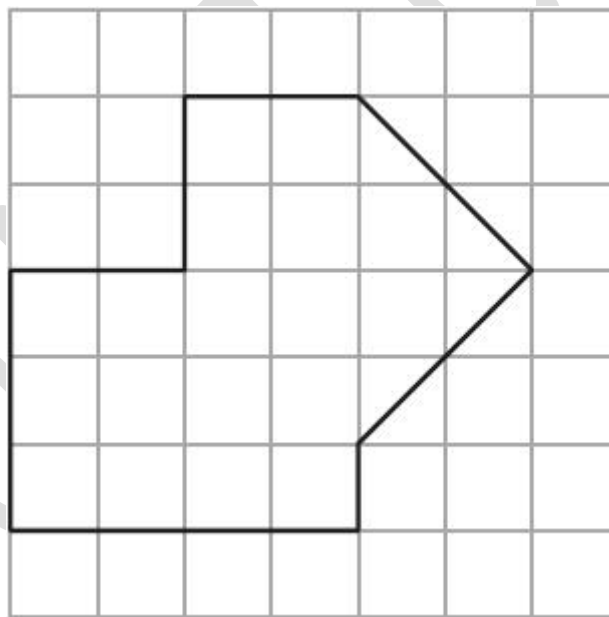
3 km

30 km

300 km

(Total for question = 1 mark)

**Q63.** Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross . This shape is drawn on centimetre square paper.



What is the area of this shape?

18 cm<sup>2</sup>

19 cm<sup>2</sup>

20 cm<sup>2</sup>

22 cm<sup>2</sup>

(Total for question = 1 mark)

**Q64.**

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

What is the mean of this set of numbers?

10    7    6    10    5    14    4

6

7

8

10

(Total for question = 1 mark)

**Q65.**

Saira's English group did a spelling test.

Here are their results.

13    9    10    13    12    7    13

(a) What is the median of these results?

.....  
(1)

(b) What is the mean of these results?

.....  
(1)

(Total for question = 2 marks)

**Q66.**

Here are the times, in seconds, that it took some members of a swimming club to complete one length.

25    23    31    28    27    28    25    32    28

(a) What is the median time?

..... seconds  
(1)

(b) What is the range of these times?

..... seconds  
(1)

**(Total for question = 2 marks)**

**Q67.**

**Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .**

Here is a number pattern.

The rule is subtract 6

54    48        36    30

What is the missing number?

26                      38                      42                      60  
                                                                 

**(Total for question = 1 mark)**



Q68.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

The rule for this number sequence is

*double the number and subtract 2*

14

26

50

98

What is the missing number?

6

8

9

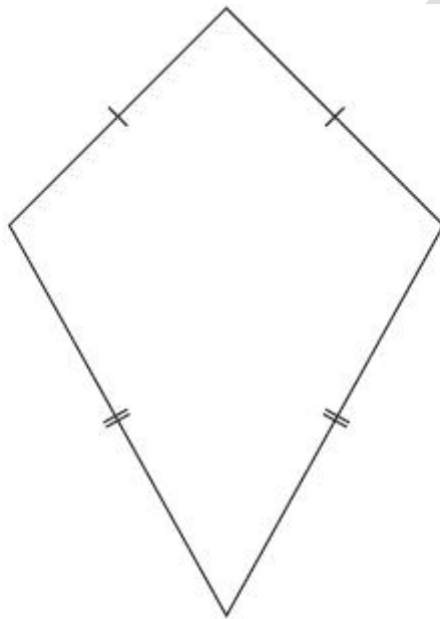
24

(Total for question = 1 mark)

Q69.

Answer the question with a cross in the box you think is correct  . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross  .

What is the name given to this polygon?



Kite

Parallelogram

Rectangle

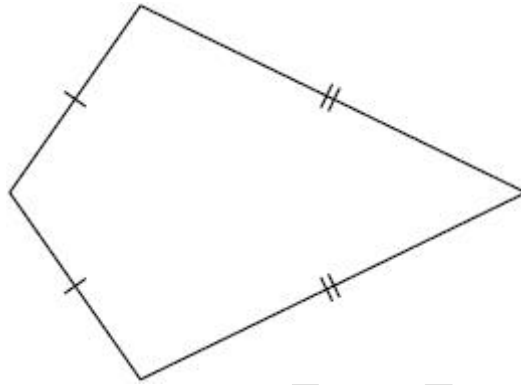
Trapezium

(Total for question = 1 mark)

Q70.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

What is the name of this shape?



Kite

A

Parallelogram

B

Rectangle

C

Rhombus

D

(Total for question = 1 mark)

Q71.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

What is the perimeter of a rectangle which is 8 cm long and 7 cm wide?

15 cm

23 cm

30 cm

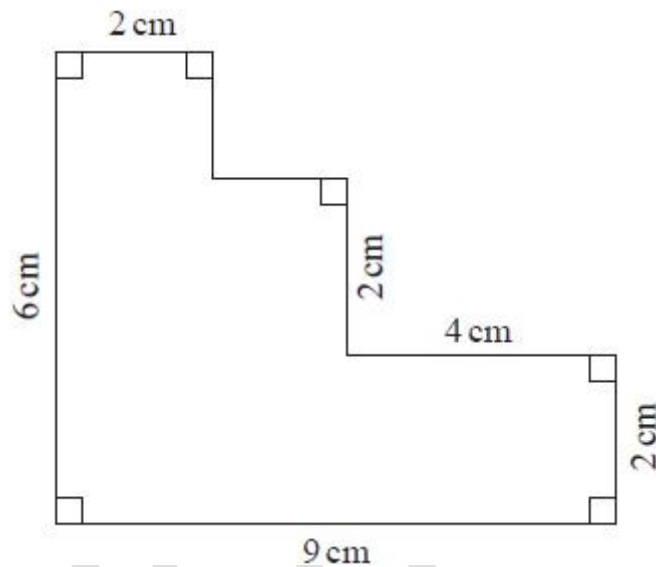
56 cm

(Total for question = 1 mark)

Q72.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

What is the perimeter of this shape?



25cm

26cm

28cm

30cm

(Total for question = 1 mark)

Q73. Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross . What is the range of these weights?

98g 83g 44g 67g 140g 98g 65g

83g

85g

96g

98g

(Total for question = 1 mark)

Q74.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

What is the size of angle  $x$ ?

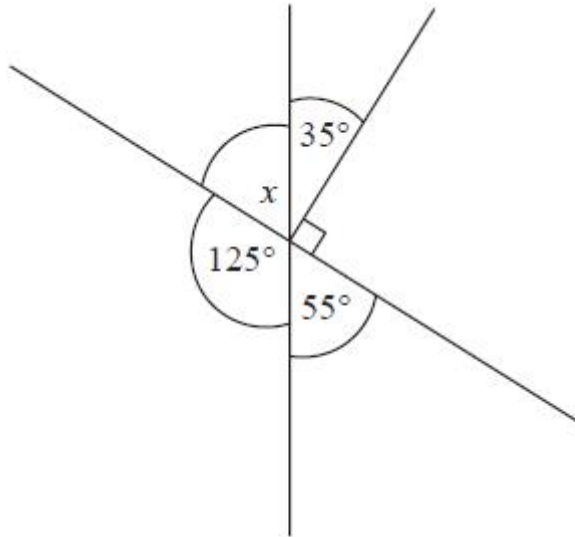


Diagram NOT  
drawn to scale

45°

55°

145°

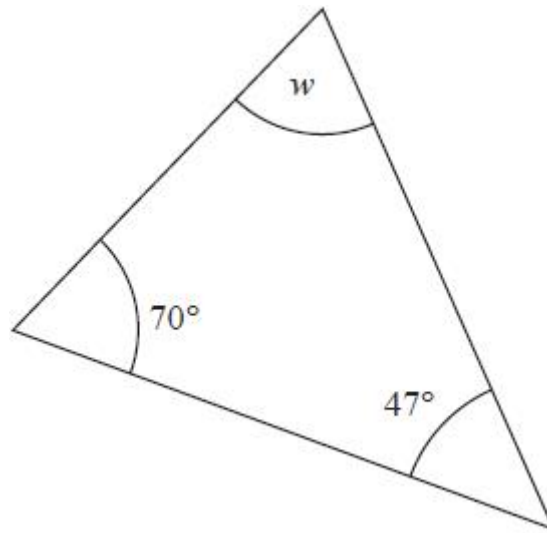
215°

(Total for question = 1 mark)

Q75.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

Here is a triangle.



What is the size of angle  $w$ ?

$63^\circ$

$73^\circ$

$110^\circ$

$133^\circ$

(Total for question = 1 mark)

Q76.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

What name is given to the angle marked  $a$ ?



Acute

Reflex

Right angle

Obtuse

(Total for question = 1 mark)

Q77.

Answer the question with a cross in the box you think is correct  . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross  .

Here is a number line.

What number is the arrow pointing to?



(Total for question = 1 mark)

Q78.

Answer the question with a cross in the box you think is correct  . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross  .

Which of these is a prime number?

- |                                     |                                     |                                     |                                     |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 15                                  | 19                                  | 36                                  | 51                                  |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

(Total for question = 1 mark)



Q79.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

Which of these is both a square number and a cube number?

9

36

64

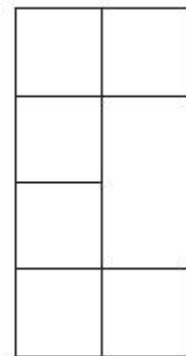
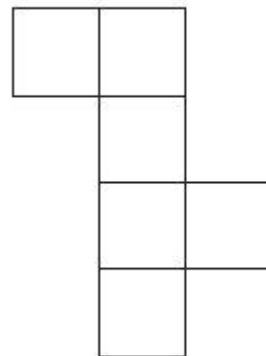
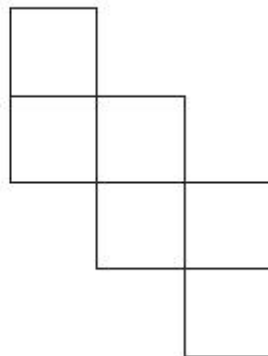
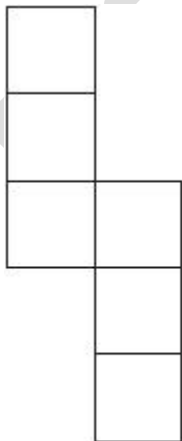
125

(Total for question = 1 mark)

Q80.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

Which of these is **not** the net of a cube?



(Total for question = 1 mark)

Q81.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

Work out

$$171 \div 5$$

$$34\frac{1}{21}$$

$$34\frac{1}{5}$$

$$34\frac{5}{21}$$

$$34\frac{4}{5}$$

(Total for question = 1 mark)

Q82.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

Work out

$$2365 + 437$$

$$1928$$

$$2792$$

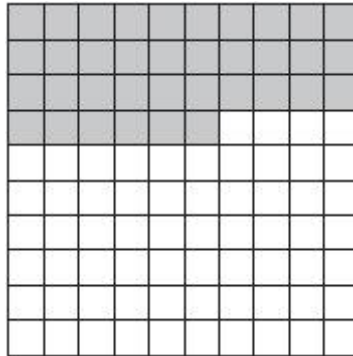
$$2802$$

$$6735$$

(Total for question = 1 mark)

**Q83.**

(a) What percentage of this shape is shaded?



..... %  
(1)

(b) What is 47% written as a fraction?

.....  
(1)

(c) Work out 10% of 50

.....  
(1)

(d) Work out 15% of 180

.....  
(1)

**(Total for question = 4 marks)**

**Q84.**

(a) Complete this table.

(2)

Fraction	Decimal	Percentage
$\frac{17}{100}$		17%
		25%
	0.3	

(b) Write a fraction equivalent to  $\frac{3}{10}$

$$\frac{3}{10} = \boxed{\quad}$$

(1)

(c) Calculate

$$2\frac{3}{8} + \frac{7}{8}$$

.....  
(2)

(d) Calculate

25% of 320

.....  
(1)

**(Total for question = 6 marks)**

Q85.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

Calculate

$$6a - 2b + c$$

when  $a = 3$ ,  $b = 6$ ,  $c = 7$

8

13

37

44

(Total for question = 1 mark)

Q86.

Complete this multiplication table.

$\times$		8	6
	18	48	
	15		30

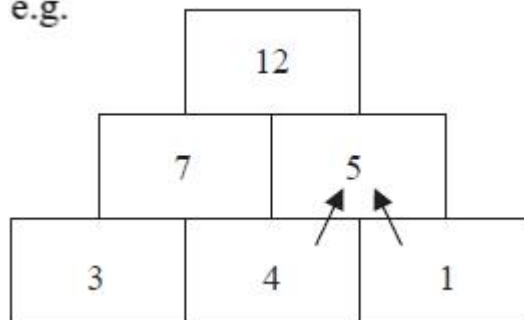
(Total for question = 2 marks)

**Q87.**

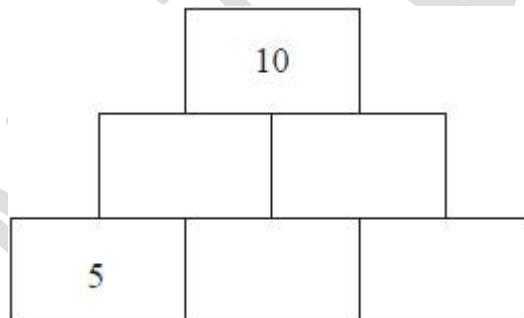
Here is a number pyramid.

To find the number in each brick add together the two bricks immediately below it.

e.g.



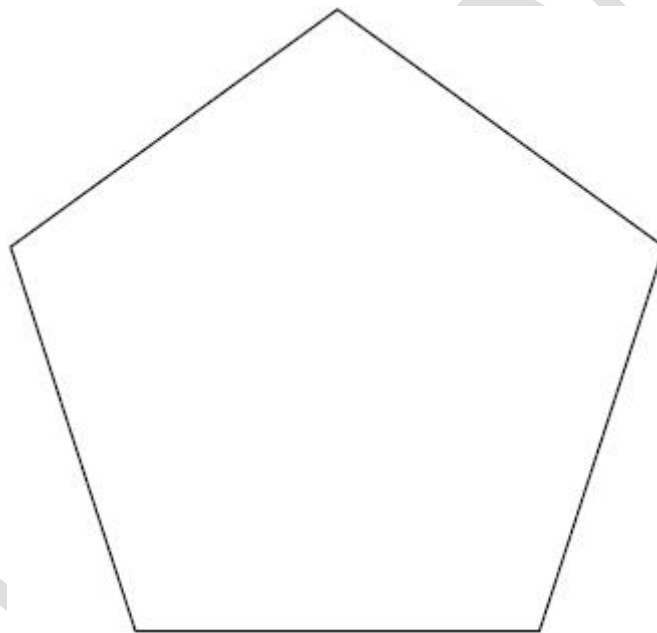
Using the same rule, complete this number pyramid.



**(Total for question = 2 marks)**

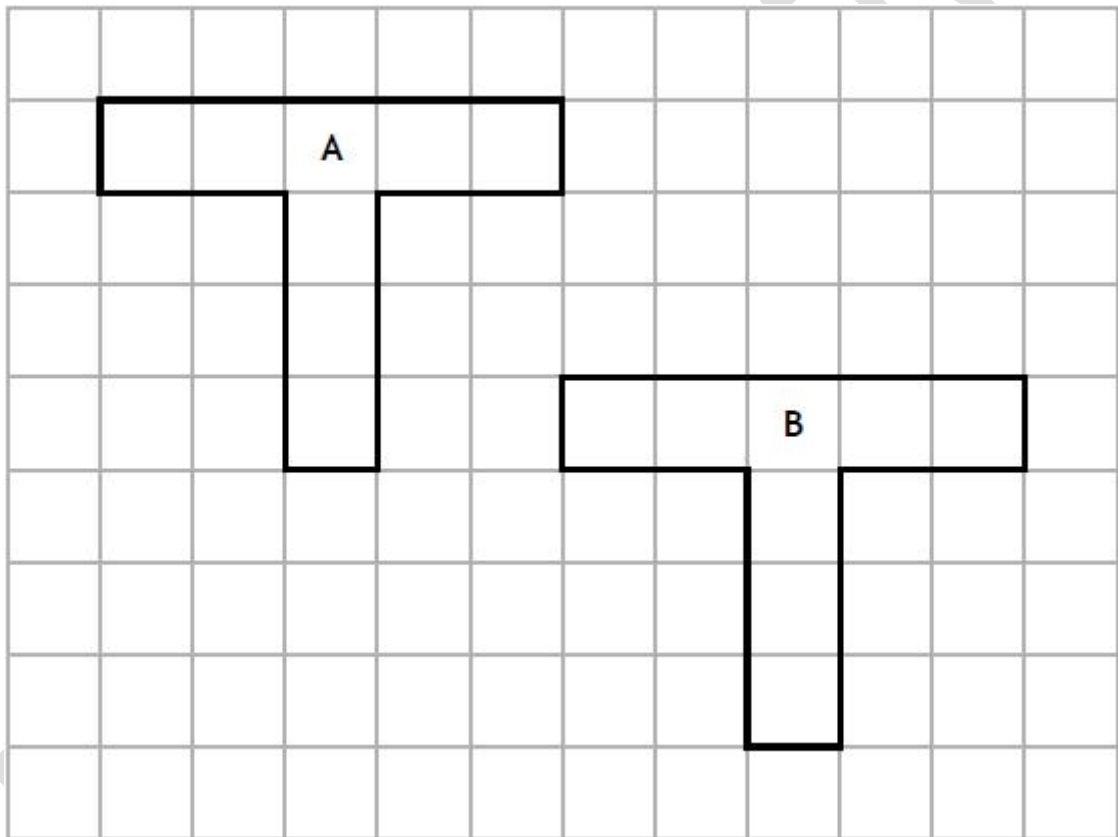
**Q88.**

(a) Draw a line of symmetry on the regular pentagon.



(1)

(b) Here are two identical shapes.



Describe the translation of Shape B onto Shape A.

.....  
.....

(2)

(Total for question = 3 marks)



**Q89.**

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

Find 30% of 60

6

A

18

B

20

C

180

D

(Total for question = 1 mark)

**Q90.**

How many days altogether are there in March, April and May?

.....

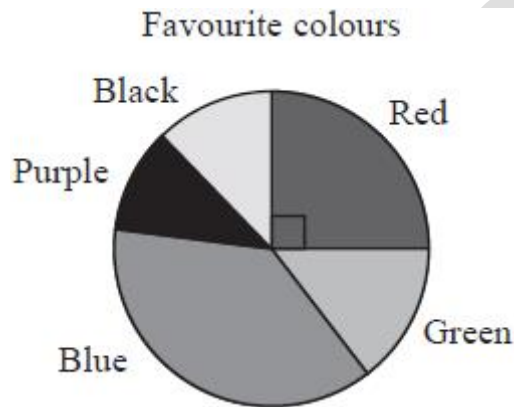
(Total for question = 1 mark)

**Q91.**

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

In a survey, some students were asked what their favourite colour is.

This pie chart shows the results.



12 students chose red.

How many students were included in the survey?

36

48

60

72

(Total for question = 1 mark)

**Q92.** Saira has 0.75 kg of chocolate.

Andrew has 350 g of chocolate.

Janine has  $\frac{1}{4}$  kg of chocolate.

How much chocolate do they have altogether?

Give units in your answer.

.....

(Total for question = 2 marks)

**Q93.**

In a shop paint pallets cost \$2.35 and paint brushes cost \$0.69



\$2.35



\$0.69

Sally has \$15

She buys 2 pallets and 3 brushes.

How much money should Sally have left?

\$ .....

**(Total for question = 2 marks)**

**Q94.**

Match each of the decimals to its equivalent fraction.

One has been done for you.

0.2  $\frac{1}{2}$

0.3  $\frac{3}{4}$

0.5  $\frac{3}{5}$

0.6  $\frac{1}{5}$

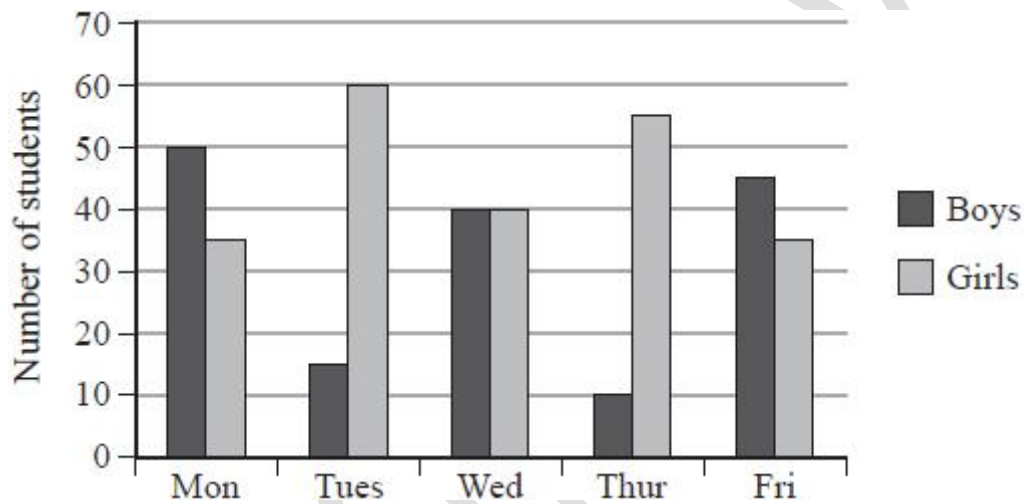
0.75  $\frac{3}{10}$

**(Total for question = 2 marks)**

Q95.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

This dual bar chart shows how many boys and girls have school dinners each day from Monday to Friday.



On which day did the most students have school dinners?

Monday

Tuesday

Wednesday

Thursday

(Total for question = 1 mark)

Q96.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

Simplify the expression

$$4x + 5y + 3x - y$$

$7x + 5$

A

$13x$

B

$7x - 4y$

C

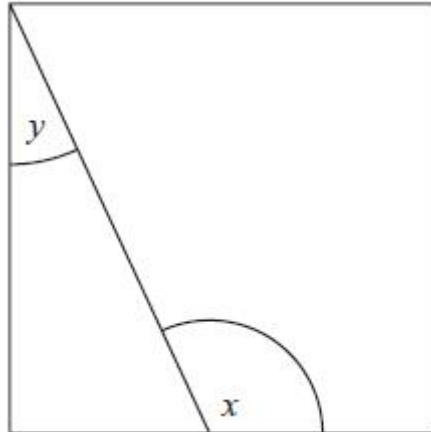
$7x + 4y$

D

(Total for question = 1 mark)

**Q97.**

Here is a triangle inside a square.



(a) Measure the size of the angle marked  $x$

.....  
(1)

(b) Majed says

*Angle  $y$  is  $30^\circ$*

Yes

No

Is Majed correct?  
Explain why.

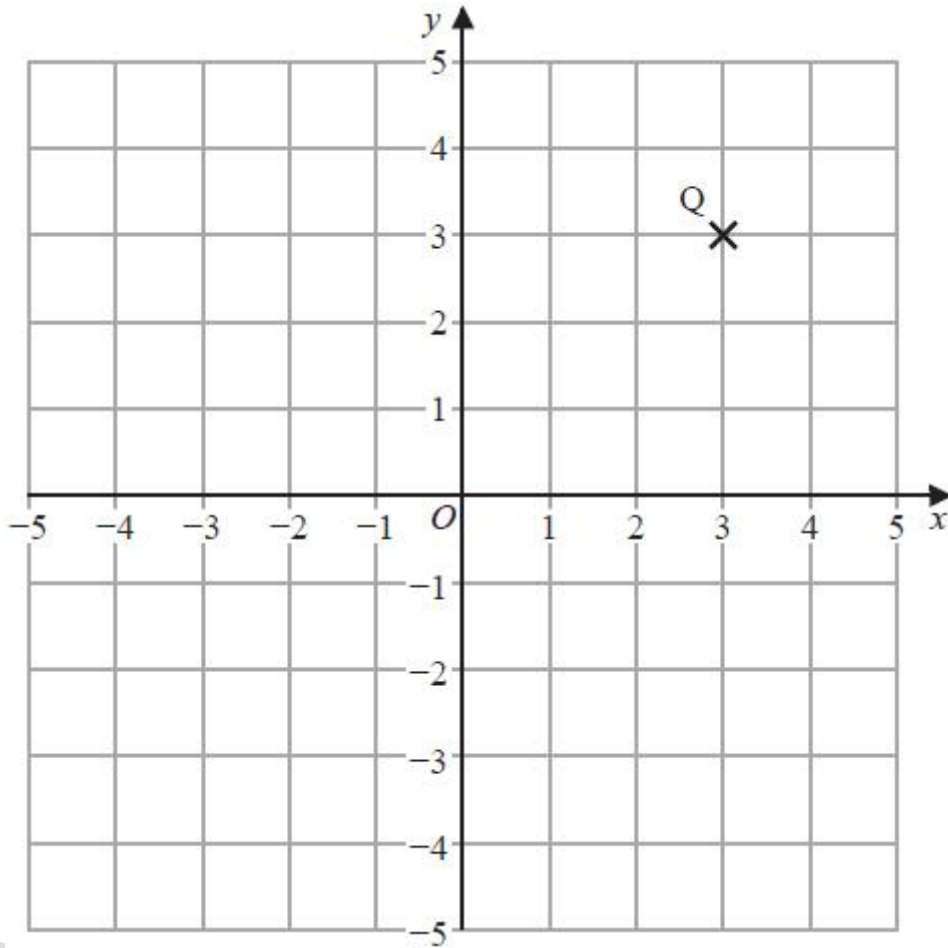
(1)

.....  
.....

**(Total for question = 2 marks)**

Q98.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .



Point Q is marked on the coordinate grid.

Point Q is reflected in the x-axis to give point R

What are the coordinates of point R?

(3, 3)

(-3, 3)

(-3, -3)

(3, -3)

(Total for question = 1 mark)



Q99.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

What is the area of this triangle?

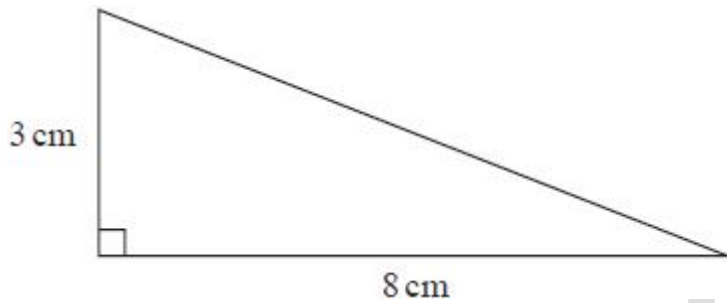


Diagram NOT accurately drawn

11 cm<sup>2</sup>

12 cm<sup>2</sup>

22 cm<sup>2</sup>

24 cm<sup>2</sup>

(Total for question = 1 mark)

Q100.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

What is 354 rounded to the nearest hundred?

300

A

350

B

360

C

400

D

(Total for question = 1 mark)

## Mark Scheme

Q1.

Question number	Answer	Mark
	C 77	(1)

Q2.

Question number	Answer	Notes	Mark															
	54 528	<p>M1 for a complete and correct method, with NO place value errors (allow ONE calculation error) OR 34 080 AND 20 448 seen NB these can be seen as jottings from other method</p> <table border="1"><tbody><tr><td>×</td><td>3000</td><td>400</td><td>0</td><td>8</td></tr><tr><td>10</td><td>30000</td><td>4000</td><td>0</td><td>80</td></tr><tr><td>6</td><td>18000</td><td>2400</td><td>0</td><td>48</td></tr></tbody></table> <p>Grids must have NO place value errors, no more than one arithmetic error, AND an intention to add.</p> <p>A1 Dep M1</p>	×	3000	400	0	8	10	30000	4000	0	80	6	18000	2400	0	48	2
×	3000	400	0	8														
10	30000	4000	0	80														
6	18000	2400	0	48														

Q3.

Question number	Answer	Notes	Mark
a	125	B1 Accept $\pm 2^\circ$	1

Question number	Answer	Notes	Mark
b	138	B1	1

Question number	Answer	Notes	Mark
c	Diameter drawn	B1 Accept unambiguous intention to draw the diameter touching the circumference	1

Question number	Answer	Notes	Mark
d	Reflex	B1	1

Q4.

Question number	Answer	Notes	Mark
a	249	B1	(1)

Question number	Answer	Notes	Mark
b	152	M1 for 212 - 60 OR for 212 unambiguously identified  A1 cao	(2)

Q5.

Question number	Answer	Notes	Mark
a	Add 3	B1 Accept +3, we MUST see reference to 'add'	(1)

Question number	Answer	Notes	Mark
b	43	B1	(1)

Q6.

Question number	Answer	Mark
	<p>The only correct answer is C - 1100</p> <p>A is not correct because 550 is <math>\frac{1}{3}</math></p> <p>B is not correct because 825 is <math>\div 2</math></p> <p>D is not correct because 2475 is <math>\div 2 \times 3</math></p>	(1)

Q7.

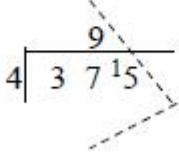
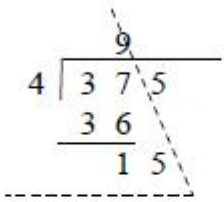
Question number	Answer	Notes	Mark
a	No and correct reason	B2 for No AND there are 60 lions at both park  If not B2 then B1 for correctly finding 60 lions at Sunny Hills or 60 lions at Long Ridge	2

Question number	Answer	Notes	Mark
b	50	<p>M1 for correct method to find number of monkeys at Long Ridge:  e.g. <math>240 \div 3 (=80)</math>  <math>240/3 (=80)</math>  <math>\frac{1}{3} \times 240 (=80)</math></p> <p>M1 for full method to find the number of leopards or giraffes at Long Ridge:  e.g.  <math>(240 - ("60" + "80")) \div 2</math>  <b>or</b>  <math>240 - "60" - "80" (=100)</math>  <b>and</b> <math>"100" \div 2</math></p> <p>A1 Dep M1</p>	3

Q8.

Question number	Answer	Notes	Mark															
	58 328	<p>M1 for a complete method with NO place value errors (allow one calculation error)  <b>or</b> 50 720 <b>AND</b> 7 608 seen</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>×</td> <td>2000</td> <td>500</td> <td>30</td> <td>6</td> </tr> <tr> <td>20</td> <td>40000</td> <td>10000</td> <td>600</td> <td>120</td> </tr> <tr> <td>3</td> <td>6000</td> <td>1500</td> <td>90</td> <td>18</td> </tr> </tbody> </table> <p>A1 Dep cao</p>	×	2000	500	30	6	20	40000	10000	600	120	3	6000	1500	90	18	2
×	2000	500	30	6														
20	40000	10000	600	120														
3	6000	1500	90	18														

Q9.

Question number	Answer	Notes	Mark
	$93\frac{3}{4}$ or 93.75 or 93 r3	<p>M1 for a correct first step to solving the division</p> <p>Eg:  <u>Short division:</u>                      9 r1 (with 1 correctly placed between the 7 and the 5)</p>  <p>Long division                      9 seen AND 36 subtracted from 37 AND the 5 brought down alongside "1"</p>  <p>Chunking methods can be used but must be complete (equal sized chunks are acceptable)</p> <p>A1 Dep M1</p>	2

Q10.

Question number	Answer	Mark
	D 7.26	(1)

Q11.

Question number	Answer	Mark
	<p>The only correct answer is C - 72</p> <p>A is not correct because 18 is 10%</p> <p>B is not correct because 45 is <math>\div 4</math></p> <p>D is not correct because 108 is 60% (180 - 40%)</p>	(1)

Q12.

Question number	Answer	Mark
	<p>A incorrect alignment</p> <p>B CORRECT ANSWER</p> <p>C correct alignment, incorrect subtraction</p> <p>D added</p>	1

Q13.

Question number	Answer	Mark
	<p>The only correct answer is B - 10</p> <p>A is not correct because 5 is <math>(4+2)+(3+3)-7</math></p> <p>C is not correct because 68 is <math>(42)+(33)-7</math></p> <p>D is not correct because 75 is <math>(42)+(33)</math></p>	(1)

Q14.

Question number	Answer	Notes	Mark
a	$5x + 3y$	M1 for $2x - 6y$ or $3x + 9y$ or $5x$ or $3y$  A1	2

Question number	Answer	Notes	Mark
b	3	B1	1

Q15.

Question number	Answer	Notes	Mark
a	$\frac{5}{4}$ oe	B1 Accept $1\frac{1}{4}$ , $\frac{10}{8}$ etc	1

Question number	Answer	Notes	Mark
b	$\frac{1}{12}$ oe	B1	1

Question number	Answer	Notes	Mark
c	$\frac{1}{10}$ oe	B1 $\frac{1}{5} \div 2 \rightarrow \frac{1}{5} \times \frac{1}{2} = \frac{1}{10}$	1

Q16.



Question number	Answer	Notes	Mark
	<p style="text-align: center;">4</p> <p>ALT Scheme:</p> <p style="text-align: center;">4</p>	<p>M1 For a method to find one relevant area e.g. 20 x15 (=300) Or “300” x 3 (=900) Or “900” x 20 (=18000) Or 100 x 50 (= 5000)</p> <p>M1 “18000” ÷ “5000” (=3.6)</p> <p>A1 cao</p> <p>M1 100 ÷ 20 (= 5) or 50 ÷ 15 (=3(.3...)) or 20 x 3 (= 60) or 60 (cm) x 45 (cm) for one face covering</p> <p>M1 1 sheet = “5” x “3” (=15) or 1 sheet = 5 coverings or 20 ÷ “5” or “60” ÷ “15”</p> <p>A1 cao</p>	<p style="text-align: center;">3</p>

	Alternative answer:  $5$	M1 $100 \div 15 (= 6(.6\dots))$ <b>or</b> $50 \div 20 (= 2(.5))$ <b>or</b> $20 \times 3 (= 60)$ <b>or</b> $60 \text{ (cm)} \times 45 \text{ (cm)}$ for one face covering  M1 $1 \text{ sheet} = "6" \times "2" (=12)$ <b>or</b> $1 \text{ sheet} = 4 \text{ coverings}$ <b>or</b> $20 \div "4"$ <b>or</b> $"60" \div "12"$  A1 ca	
--	--------------------------------	---	--

Q17.

Question number	Answer	Mark
	<p><b>The only correct answer is D - square</b></p> <p>A is not correct because 16 is not an odd number</p> <p>B is not correct because 16 is not a prime number</p> <p>C is not correct because 16 is not a cube number</p>	<b>(1)</b>

Q18.

Question number	Answer	Notes	Mark
	9, 25, 36, 81	<p>M1 for at least 1 square number correctly identified (with no more than 1 incorrect)</p> <p>A1 all 4 correctly identified with NO incorrect</p>	2

Q19.

Question number	Answer	Notes	Mark
(a)	$\frac{4}{10}$	B1	(1)

Question number	Answer	Notes	Mark
(b)	$\frac{2}{3}$	B1	(1)

Q20.

Question number	Answer	Notes	Mark																
a	<table border="1"> <thead> <tr> <th></th> <th>Straight home</th> <th>After-school club</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Girls</td> <td></td> <td>7</td> <td>14</td> </tr> <tr> <td>Boys</td> <td>8</td> <td></td> <td></td> </tr> <tr> <td>Total</td> <td></td> <td></td> <td>27</td> </tr> </tbody> </table>		Straight home	After-school club	Total	Girls		7	14	Boys	8			Total			27	B1 for all 3 terms correct	1
	Straight home	After-school club	Total																
Girls		7	14																
Boys	8																		
Total			27																

Question number	Answer	Notes	Mark																
b	<table border="1"> <thead> <tr> <th></th> <th>Straight home</th> <th>After-school club</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Girls</td> <td>7</td> <td>7</td> <td>14</td> </tr> <tr> <td>Boys</td> <td>8</td> <td>5</td> <td>13</td> </tr> <tr> <td>Total</td> <td>15</td> <td>12</td> <td>27</td> </tr> </tbody> </table>		Straight home	After-school club	Total	Girls	7	7	14	Boys	8	5	13	Total	15	12	27	<p>B2 for fully correct table</p> <p>If not B2 then B1 for at least 2 correct unshaded sections</p>	2
	Straight home	After-school club	Total																
Girls	7	7	14																
Boys	8	5	13																
Total	15	12	27																

Q21.

Question number	Answer	Notes	Mark												
	<table border="1"> <thead> <tr> <th>Sock colour</th> <th>Tally</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td></td> <td>9</td> </tr> <tr> <td>Blue</td> <td></td> <td>4</td> </tr> <tr> <td>Grey</td> <td></td> <td>12</td> </tr> </tbody> </table>	Sock colour	Tally	Total	Black		9	Blue		4	Grey		12	<p>B2 for 5 or 6 correct sections</p> <p>If not B2 then B1 for at least 3 correct sections</p>	2
Sock colour	Tally	Total													
Black		9													
Blue		4													
Grey		12													

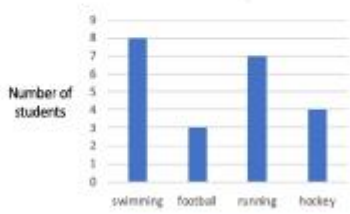
Q22.

Question number	Answer	Notes	Mark
a	<p>Yellow total = 10</p> <p>Green tally (3)</p> <p>Blue Tally (5 'gated' and 1)</p> <p>Purple total = 1</p>	<p>B2 for fully correct</p> <p>If not B2, then B1 for 2 or 3 correct</p>	2

Question number	Answer	Notes	Mark
b	<p>Red 2 sections shaded</p> <p>Yellow 5 sections shaded</p> <p>Green 1½ sections shaded</p> <p>Blue 3 sections shaded</p> <p>Purple ½ section shaded</p>	<p>B3 - fully correct AND labelled pie chart</p> <p>B2 - fully correct sections with no labels</p> <p>or</p> <p>at least 2 correct AND labelled sections</p> <p>B1 – 1 correct AND labelled section</p> <p><b>NB: Must see sections drawn</b></p>	3

Q23.

Question number	Answer	Notes	Mark															
a	Tally Chart <table border="1"> <thead> <tr> <th>Sport</th> <th>Tally</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Swimming</td> <td>    </td> <td>8</td> </tr> <tr> <td>Football</td> <td>   </td> <td>3</td> </tr> <tr> <td>Running</td> <td>    </td> <td>7</td> </tr> <tr> <td>Hockey</td> <td>    </td> <td>4</td> </tr> </tbody> </table>	Sport	Tally	Total	Swimming		8	Football		3	Running		7	Hockey		4	B1 fully correct tally chart	1
Sport	Tally	Total																
Swimming		8																
Football		3																
Running		7																
Hockey		4																

Question number	Answer	Notes	Mark
b	Bar Chart 	B1 Linear Scale (starting at 0) B1 Correct labelling on each axis B1 Correct bar heights NB ft their incorrect tally chart	3

Q24.

Question number	Answer	Notes	Mark
	No and reason e.g. * arrives at 8:01 * 36 min journey, only has 35 mins * will be 1 min late	M1 evidence of an attempt to add <u>all of</u> 5, 12 and 19 to 7:25 OR 8:01 seen as his arrival time A1 No identified (in tick box or explanation) and 8:01 or acceptable reason NB: no mark awarded for just NO ticked	(2)

Q25.

Question number	Answer	Mark
	<p>The only correct answer is D - <math>4x + 12y</math></p> <p>A is not correct because <math>4x+3y</math> only multiplied x term</p> <p>B is not correct because <math>4x+7y</math> multiplies x term but adds y term</p> <p>C is not correct because <math>12x+y</math> multiplies the numbers and leaves <math>x+y</math></p>	(1)

Q26.

Question number	Answer	Notes	Mark
a	5	B1	1

Question number	Answer	Notes	Mark
b	6	B1	1

Question number	Answer	Notes	Mark
c	9	B1	1

Q27.

Question number	Answer	Notes	Mark
a	1, 2, 3, 4, 6, 8, 12, 16, 24, 48	B2 for 9 or 10 correct factors with NO incorrect.  If not B2, then B1 for at least 6 correct factors, allow 1 incorrect.  Accept factors in any order	2

Question number	Answer	Notes	Mark
b	6	B1	1

Question number	Answer	Notes	Mark
c	$2 \times 2 \times 2 \times 2 \times 3$	B1 or $2^4 \times 3$ oe  Accept sight of 2 2 2 2 3	1

Q28.

Question number	Answer	Notes	Mark
	48	M1 for a fully correct method e.g. $150 \times 0.32 (=48)$ $15+15+15+1.5+1.5 (=48)$ or $150 \times 32/100 (=48)$  A1 cao	2

Q29.

Question number	Answer	Notes	Mark
a	77	B1	1

Question number	Answer	Notes	Mark
b	$9a - 7b$	M1 for $6a + 2b$ or $3a - 9b$ or $9a$ or $-7b$  A1 $9a - 7b$ or $-7b + 9a$	2

Question number	Answer	Notes	Mark
c	4	B1	1

Q30.

Question number	Answer	Mark
	A      62	(1)

Q31.

Question number	Answer	Mark
	The only correct answer is C - 42  A is not correct because $-9 = 3^2 + 17 - (8 \times 4) - 3$ B is not correct because $18 = 3^2 + (17 - 8) \times (4 - 3)$ D is not correct because $69 = (3^2 + 17 - 8) \times 4 - 3$	(1)



Q32.

Question number	Answer	Notes	Mark
	4	M1 Blue = 6 or Green = 6 or Red + Yellow + Orange = 12 or Orange = 1/6 or Red = 1/6 or Yellow = 1/6 or $24 \div 2 \div 3$ or "12" $\div 3$  A1 cao	2

Q33.

Question number	Answer	Mark
	D      \$240	(1)

Q34.

Question number	Answer	Notes	Mark
a	10	B1	1

Question number	Answer	Notes	Mark
b	11	B1	1

Q35.

Question number	Answer	Mark
	A only identified 1 B only identifies symmetry from the edges OR the vertices C common incorrect symmetry answer, for all shapes D CORRECT ANSWER	1

Q36.

Question number	Answer	Notes	Mark
	7	B1	(1)

Q37.

Question number	Answer	Notes	Mark
a	29.54	B1	(1)

Question number	Answer	Notes	Mark
b	\$0.46 or .46 or 46 c(cents)  Accept any letter or notation after 46	B1 Accept ft from part a	(1)

Q38.

Question number	Answer	Notes	Mark
	2.1 kg	B1 correct conversion to 0.85 kg or 1 250 g  B1 correct answer 2.1 kg	(2)

Q39.

Question number	Answer	Mark
	B \$11.51	(1)

Q40.

Question number	Answer	Notes	Mark
	Sugar 50g Butter 0g (or left blank) Flour 125g	M2 For all three correctly identified required values (S:250, B:500, F:625) OR 1 correct final answer (S:50, B:0, F:125)  If not M2 then: M1 For SF of 2.5 seen or used OR one correctly identified required value (S:250, B:500, F:625)  A1 cao  SCB1 if no marks awarded, award SCB1 for a 'required value' given as a final value	(3)

Q41.

Question number	Answer	Mark
	A $0.66 \div 3$ B $0.66 \times 3/2$ C $0.66 \times 2$ D CORRECT ANSWER	1

Q42.

Question number	Answer	Notes	Mark
a	$\frac{1}{2}$ AND $\frac{1}{4}$	B1	1

Question number	Answer	Notes	Mark
bi	6	B1	1

Question number	Answer	Notes	Mark
bii	e.g.  $\frac{3}{4}$ $9/12$ $15/20$ oe or $3/1$ $36/12$ $15/5$ oe or $3/6$ $6/12$ $15/30$ oe or $3/3$ $12/12$ $15/15$ oe or $3/2$ $18/12$ $15/10$ oe	B2 for three different equivalent fractions  B1 for at least 1 correct pair of fractions	2

Question number	Answer	Notes	Mark
c	$\frac{14}{15}$ oe	B1	1

Question number	Answer	Notes	Mark
d	$\frac{6}{12}$ or $\frac{1}{2}$ oe	B1	1

Q43.

Question number	Answer	Notes	Mark
		<p>B2 fully correct</p> <p>If not B2, then B1 for one correct join</p>	2

Q44.

Question number	Answer	Notes	Mark
(a)	<p>Correct pair of parallel sides e.g.</p>	B1	(1)

Question number	Answer	Notes	Mark
(b)	Isosceles	B1	(1)

Question number	Answer	Notes	Mark
(c)	Diameter	B1	(1)

Question number	Answer	Notes	Mark
(d)	130	B1	(1)

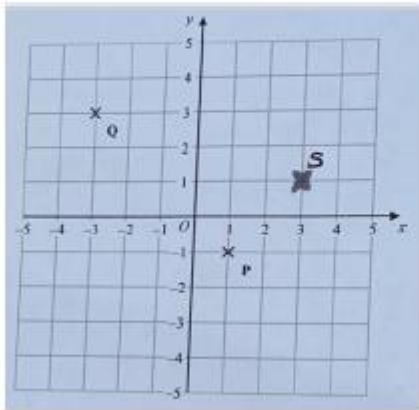
Q45.

Question number	Answer	Notes	Mark
a	18	B1	1

Question number	Answer	Notes	Mark
b	16	B1	1

Q46.

Question number	Answer	Notes	Mark
(a)	Point S plotted at (3, 1)	B1	(1)



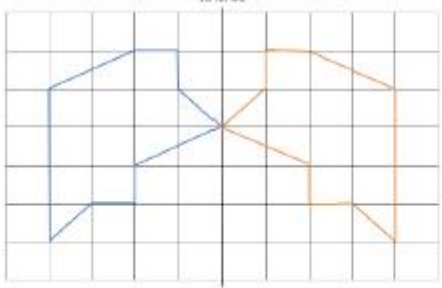
Question number	Answer	Notes	Mark
(b)	(-1, 5)	B1	(1)

Q47.

Question number	Answer	Notes	Mark
	Yes and 108	<p>M1 for a method to calculate one percentage  e.g.  <math>240 \times 25 \div 100 (= 60)</math>  <b>or</b>  <math>240 \times 30 \div 100 (= 72)</math>  <b>or</b>  <math>240 \times 55 \div 100 (= 132)</math></p> <p>M1 for a fully correct method to find how many students walked  e.g.  <math>240 - ('60' + '72') (= 108)</math>  <b>or</b>  <math>240 - '132' (= 108)</math></p> <p>A1 for YES &amp; 108 seen</p>	3
		<p><u>Alternative method</u></p> <p>M1 for a method to find total percentage travelling by car + bus  e.g.  <math>25\% + 30\% (= 55\%)</math>  <math>25 + 30 (= 55)</math>  <b>or</b>  for a method to find percentage who walk  e.g. <math>100\% - '55\%' (= 45\%)</math></p> <p>M1 for a fully correct method to find how many students walked  e.g.  <math>240 \times 45 \div 100 (= 108)</math>  <b>or</b>  <math>240 - '(240 \times 55 \div 100)' (= 108)</math></p> <p>A1 for YES &amp; 108 seen</p>	

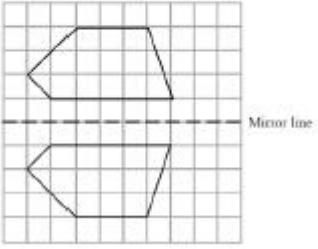


Q48.

Question number	Answer	Notes	Mark
a		B1	1

Question number	Answer	Notes	Mark
b	72	M1 fully correct method e.g. $6 \times 4 \times 3 (=72)$ or $“24” \times 3$ or $“12” \times 6$ or $“18” \times 4$  A1 cao	2

Q49.

Question number	Answer	Notes	Mark
	Reflection 	B1 overlay provided	1

Q50.

Question number	Answer	Notes	Mark
(a)	37	B1	(1)

Question number	Answer	Notes	Mark
(b)	0.53, 3.05, 3.5, 5.3	B1	(1)

Q51.

Question number	Answer	Notes	Mark
	<p>Correct pattern</p>	B1	(1)

Q52.

Question number	Answer	Mark
	<p>The only correct answer is A - <math>x - y</math></p> <p>B is not correct because <math>2x+x</math> and <math>3y+4y</math> has been calculated, the signs have not been considered</p> <p>C is not correct because <math>2+3+4xy</math> has been calculated</p> <p>D is not correct because <math>2x-x = 2</math> has been calculated</p>	(1)

Q53.

Question number	Answer	Mark
	<p>The only correct answer is A - <math>2a + b</math></p> <p>B is not correct because the 'b' terms have been added</p> <p>C is not correct because all terms have been calculated as one</p> <p>D is not correct because <math>3b</math> and <math>a</math> have been added</p>	(1)

Q54.

Question number	Answer	Notes	Mark
a	$2a - 2b$	B1 Accept: $-2b + 2a$ But ensure the signs are correct	(1)

Question number	Answer	Notes	Mark
b	$11x + 5y$	M1 for $8x - 4y$ or $3x + 9y$ or $11x$ or $5y$  A1 cao	(2)

Question number	Answer	Notes	Mark
c	4	B1	(1)

Q55.

Question number	Answer	Notes	Mark
	17:25	M1 evidence of an attempt to add <u>all of</u> 10, 7, 18 and 5 to 16:45  A1 cao Accept 5:25	2

Q56.

Question number	Answer	Mark
	B Cuboid	(1)

Q57.

Question number	Answer	Notes	Mark
(a)	(4, -2)	B1	(1)

Question number	Answer	Notes	Mark
(b)	(-3, 2)	B1	(1)

Q58.

Question number	Answer	Mark
	<p><b>The only correct answer is C - hundredths</b></p> <p>A is not correct because the 3 represents 'ones'</p> <p>B is not correct because the 6 represents 'tens'</p> <p>D is not correct because the 3 represents 'tenths'</p>	(1)

Q59.

Question number	Answer	Mark
	C $\frac{7}{12}$	(1)

Q60.

Question number	Answer	Mark
	<p><b>The only correct answer is A – 127 000</b></p> <p>B is not correct because 127 400 is incorrect rounding down to the nearest hundred</p> <p>C is not correct because 127 500 is rounded to the nearest hundred</p> <p>D is not correct because 128 000 is incorrectly rounded up to the nearest thousand</p>	1

Q61.

Question number	Answer	Notes	Mark
	280	M1 for complete method e.g. $112 \div 2 \times 5$ or $112 \div 2 (= 56)$ and $'56' \times 5$  A1 cao	2

Q62.

Question number	Answer	Mark
	<b>The only correct answer is B - 3 km</b>  A is not correct because $0.3\text{km} = 300\text{m}$  C is not correct because $30\text{km} = 30000\text{m}$  D is not correct because $300\text{km} = 300000\text{m}$	<b>(1)</b>

Q63.

Question number	Answer	Mark
	<b>The only correct answer is C - <math>20\text{cm}^2</math></b>  A is not correct because $18\text{cm}^2$ is the area of just squares  B is not correct because $19\text{cm}^2$ is the area with $4 \times \frac{1}{2} \text{ sq} = 1\text{cm}^2$  D is not correct because $22\text{cm}^2$ is the area counting $\frac{1}{2} \text{ sq}$ as whole	<b>(1)</b>

Q64.

Question number	Answer	Mark
	<p>The only correct answer is C - 8</p> <p>A is not correct because 6 is not the mean</p> <p>B is not correct because 7 is the median</p> <p>D is not correct because 10 is the range (or mode)</p>	1

Q65.

Question number	Answer	Notes	Mark
a	12	B1	1

Question number	Answer	Notes	Mark
b	11	B1	1

Q66.

Question number	Answer	Notes	Mark
(a)	28	B1	(1)

Question number	Answer	Notes	Mark
(b)	9	B1	(1)

Q67.

Question number	Answer	Mark
	<p>The only correct answer is C - 42</p> <p>A is not correct because <math>48 - 6 \neq 26</math></p> <p>B is not correct because <math>48 - 6 \neq 38</math></p> <p>D is not correct because <math>48 - 6 \neq 60</math></p>	1

Q68.

Question number	Answer	Mark
	<p>The only correct answer is B - 8</p> <p>A is not correct because 6 is 14 subtract 2 then half</p> <p>C is not correct because 9 is 14 halved then add 2</p> <p>D is not correct because 24 is 14 subtract 2 then double</p>	1

Q69.

Question number	Answer	Mark
	<p>The only correct answer is A – kite</p> <p>B is not correct because it is not a parallelogram</p> <p>C is not correct because it is not a rectangle</p> <p>D is not correct because it is not a trapezium</p>	(1)

Q70.



Question number	Answer	Mark
	A Kite	(1)

Q71.

Question number	Answer	Mark
	C 30cm	(1)

Q72.

Question number	Answer	Mark
	<p><b>The only correct answer is D - 30 cm</b></p> <p>A is not correct because 25cm is the total of only the given lengths</p> <p>B is not correct because 26cm incorrectly calculates missing lengths</p> <p>C is not correct because 28cm only adds one missing length</p>	(1)

Q73.

Question number	Answer	Mark
	<p><b>The only correct answer is C - 96g</b></p> <p>A is not correct because 83g is the median</p> <p>B is not correct because 85g is the mean</p> <p>D is not correct because 98g is the mode</p>	(1)

Q74.

Question number	Answer	Mark
	B $55^\circ$	(1)

Q75.

Question number	Answer	Mark
	A $63^\circ$	(1)

Q76.

Question number	Answer	Mark
	<p>The only correct answer is B - Reflex</p> <p>A is not correct because it is not acute</p> <p>C is not correct because it is not a right angle</p> <p>D is not correct because it is not obtuse</p>	1

Q77.

Question number	Answer	Mark
	<p>The only correct answer is A - -4</p> <p>B is not correct because -2 is incorrect scale</p> <p>C is not correct because 2 is incorrect use of scale and working with positive numbers</p> <p>D is not correct because 4 is incorrectly working with positive numbers</p>	(1)

Q78.

Question number	Answer	Mark
	<p>The only correct answer is B - 19</p> <p>A is not correct because 15 is not prime</p> <p>C is not correct because 36 is not prime</p> <p>D is not correct because 51 is not prime</p>	1

Q79.

Question number	Answer	Mark
	<p>A square number</p> <p>B square number</p> <p>C CORRECT ANSWER</p> <p>D cube number</p>	1

Q80.

Question number	Answer	Mark
	<p><b>The only correct answer is D</b></p> <p>A is not correct because the net folds to form a cube</p> <p>B is not correct because the net folds to form a cube</p> <p>C is not correct because the net folds to form a cube</p>	(1)

Q81.

Question number	Answer	Mark
	B $34\frac{1}{5}$	(1)

Q82.

Question number	Answer	Mark
	<p><b>The only correct answer is C - 2802</b></p> <p>A is not correct because 1928 is subtracting</p> <p>B is not correct because 2792 is adding without carrying</p> <p>D is not correct because 6735 is incorrect place value / lining up</p>	(1)

Q83.

Question number	Answer	Notes	Mark
a	36	B1	1

Question number	Answer	Notes	Mark
b	$\frac{47}{100}$	B1	1

Question number	Answer	Notes	Mark
c	5	B1	1

Question number	Answer	Notes	Mark
d	27	B1	1

Q84.

Question number	Answer	Notes	Mark												
a	<table border="1"> <thead> <tr> <th>Fraction</th> <th>Decimal</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td><math>\frac{17}{100}</math></td> <td>0.17</td> <td>17%</td> </tr> <tr> <td><math>\frac{25}{100}</math> oe</td> <td>0.25</td> <td>25%</td> </tr> <tr> <td><math>\frac{30}{100}</math> oe</td> <td>0.3</td> <td>30%</td> </tr> </tbody> </table>	Fraction	Decimal	Percentage	$\frac{17}{100}$	0.17	17%	$\frac{25}{100}$ oe	0.25	25%	$\frac{30}{100}$ oe	0.3	30%	<p>B2 for fully correct</p> <p>If not B2 then B1 for at least 3 correct (ignoring incorrect) responses</p>	2
Fraction	Decimal	Percentage													
$\frac{17}{100}$	0.17	17%													
$\frac{25}{100}$ oe	0.25	25%													
$\frac{30}{100}$ oe	0.3	30%													

Question number	Answer	Notes	Mark
b	$\frac{6}{20}$ oe	<p>B1</p> <p>accept any correct equivalent fraction for <math>\frac{3}{10}</math></p>	1

Question number	Answer	Notes	Mark
c	$3\frac{1}{4}$ oe	<p>M1 for <math>\frac{19}{8}</math> or <math>2\frac{10}{8}</math> or <math>\frac{26}{8}</math> seen</p> <p>A1</p> <p>accept <math>3\frac{2}{8}</math> or <math>\frac{26}{8}</math></p>	2

Question number	Answer	Notes	Mark
d	80	B1	1

Q85.

Question number	Answer	Mark
	B 13	(1)

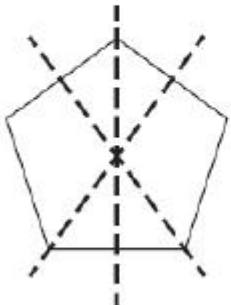
Q86.

Question number	Answer	Notes	Mark												
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X	<input type="text" value="3"/>	8	6												
<input type="text" value="6"/>	18	48	<input type="text" value="36"/>												
<input type="text" value="5"/>	15	<input type="text" value="40"/>	30												

Q87.

Question number	Answer	Notes	Mark
	Correct pyramid	M1 middle line totals 10 (accept 1 and 9)  A1  Note: 1 and 9 are acceptable in the middle line as understanding that they must total 10	2

Q88.

Question number	Answer	Notes	Mark
(a)	Line of symmetry  	B1 any one line of symmetry.	(1)

Question number	Answer	Notes	Mark
(b)	5 Left and 3 up    oe	B2 for fully correct translation.  or  B1 for one correct.	(2)

Q89.

Question number	Answer	Mark
	B 18	(1)

Q90.

Question number	Answer	Notes	Mark
	92	B1	1

Q91.

Question number	Answer	Mark
	B 48	(1)

Q92.

Question number	Answer	Notes	Mark
	1350 g or 1.35 kg	M1 for one correct conversion e.g. If using kg; 0.35(kg) or 0.25(kg) If using g; 750(g) or 250(g)  A1 cao	2

Q93.



Question number	Answer	Notes	Mark
	\$8.23	<p>M1 fully complete method  e.g.  <math>15 - [(2.35 \times 2) + (0.69 \times 3)]</math>  <math>15 - 4.70 - 2.07</math>  Or  6.77 seen</p> <p>A1</p> <p>SCB1 for fully correct use of 2 pallets and 2 brushes. Working must be seen.  e.g.  <math>15 - [(2.35 \times 2) + (0.69 \times 2)] = 8.92</math>  OR  for fully correct use of 3 pallets and 2 brushes. Working must be seen.  e.g.  <math>15 - [(2.35 \times 3) + (0.69 \times 2)] = 6.57</math>  OR  for fully correct use of 3 pallets and 3 brushes. Working must be seen.  e.g.  <math>15 - [(2.35 \times 3) + (0.69 \times 3)] = 5.88</math></p>	2

Q94.

Question number	Answer	Notes	Mark
	<p>Correctly joined decimals to fraction:</p> <p>0.2 → 1/5  0.3 → 3/10  (0.5 → 1/2)  0.6 → 3/5  0.75 → 3/4</p>	<p>B2 all correctly joined  B1 for 2 or more correctly joined</p> <p>Do not count anything joined to more than one</p>	(2)

Q95.

Question number	Answer	Mark
	<p>The only correct answer is A - Monday (85)</p> <p>B is not correct because Tuesday = 75</p> <p>C is not correct because Wednesday = 80</p> <p>D is not correct because Thursday = 65</p>	(1)

Q96.

Question number	Answer	Mark
	D $7x + 4y$	(1)

Q97.

Question number	Answer	Notes	Mark
a	115	B1	1

Question number	Answer	Notes	Mark
b	No & $y=25^\circ$	B1 <i>accept:</i> <i>180-'115' (=65) AND 90-'65'</i> <i>= '25'</i>	1

Q98.

Question number	Answer	Mark
	A plotted point B $x = -3$ C $x = -3, y = -3$ D CORRECT ANSWER	1

Q99.

Question number	Answer	Mark
	B $12 \text{ cm}^2$ The only correct answer is B - 8  A is not correct because 6 is the denominator  C is not correct because 40 is $5/6$  D is not correct because 288 is $48 \times 6$	1

Q100.

Question number	Answer	Mark
	D 400	(1)