

Answer **all** questions in the spaces provided.

1 (a) In a shop 100 g of cheese cost 56 p.
Joe buys 250 g of the cheese.

How much does he pay?

.....
.....

Answer £ (2 marks)

1 (b) A packet of biscuits costs 27p.

How many packets can Joe buy for £1?

.....
.....

Answer (1 mark)

2 (a) Write the number, seventy five thousand and forty, in figures.

Answer (1 mark)

2 (b) Write the number 9008 in words.

Answer (1 mark)

Turn over for the next question



3 Here are five number cards.

2

10

12

20

25

3 (a) Choose one of the cards to give the percentage that is equivalent to $\frac{1}{4}$

Answer % (1 mark)

3 (b) Choose two of the cards to make a fraction that is equivalent to $\frac{1}{5}$

Answer $\frac{\text{}}{\text{}}$ (1 mark)

3 (c) Choose two of the cards to make a fraction that is equivalent to 50%.

Answer $\frac{\text{}}{\text{}}$ (1 mark)



- 4** People who have been married for a certain number of years have special anniversaries.

Number of years	Name of Anniversary
25	Silver
30	Pearl
40	Ruby
50	Golden
60	Diamond

- 4 (a)** John and Jane were married in 1972.

In what year was their silver anniversary?

.....

Answer (1 mark)

- 4 (b)** Abdul and Jasmin had their golden anniversary in 2004.

In what year were they married?

.....

Answer (1 mark)

- 4 (c)** Zeke and Ruth had their ruby anniversary in 1989.

In what year was their diamond anniversary?

.....

Answer (2 marks)

Turn over for the next question



5 The number of hours of sleep needed by a child is given by the formula

$\text{Number of hours needed} = \frac{30 - \text{age of child in years}}{2}$

5 (a) Use the formula to work out the number of hours needed for

5 (a) (i) Suki, who is six years old

.....

Answerhours (2 marks)

5 (a) (ii) George, who is a new born baby.

.....

Answerhours (1 mark)

5 (b) Mark needs 13 hours sleep.

Use the formula to work out Mark's age.

.....

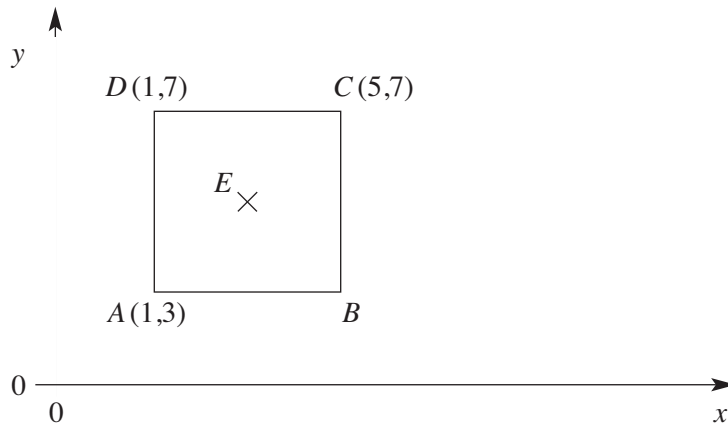
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.....

Answer years old (2 marks)



6 $ABCD$ is a square.
 AB is parallel to the x axis.



6 (a) Work out the coordinates of B .

.....

Answer (..... ,) (1 mark)

6 (b) Work out the length of AD .

.....

Answerunits (1 mark)

6 (c) Work out the area of the square.

.....

Answersquare units (1 mark)

6 (d) The centre of the square is E .

Work out the coordinates of E .

.....

Answer (..... ,) (1 mark)



7 Ruth has four number cards.

4

8

10

12

She chooses a card at random.

Draw lines connecting the probability of each statement to the correct position on the probability scale.

It is an even number

It is the number 3

It is a number less than 9

It is the number 10

● Certain



● Even chance



● Impossible

(3 marks)



8 A bag contains a red ball (R), a blue ball (B) and a green ball (G).
 A coin can land on heads (H) or tails (T).
 A ball is chosen at random from the bag and the coin is thrown.
 One of the possible outcomes is a red ball and a head (RH).

List all the other possible outcomes.

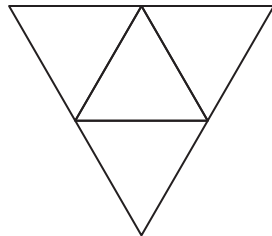
Answer RH,

(2 marks)

9 (a) Draw a sketch of a cube.

(1 mark)

9 (b) The net of a 3-D shape is drawn below.



Circle the name of the solid formed by the net.

Triangular prism

Tetrahedron

Equilateral triangle

(1 mark)

7

Turn over ►



10 (a) Work out $(3 + 4) \times 5$

.....

Answer (1 mark)

10 (b) Insert **one** pair of brackets to make the following calculation correct.

.....

$$6 \times 9 - 7 + 3 = 15$$

(1 mark)

10 (c) Insert **two** pairs of brackets to make the following calculation correct.

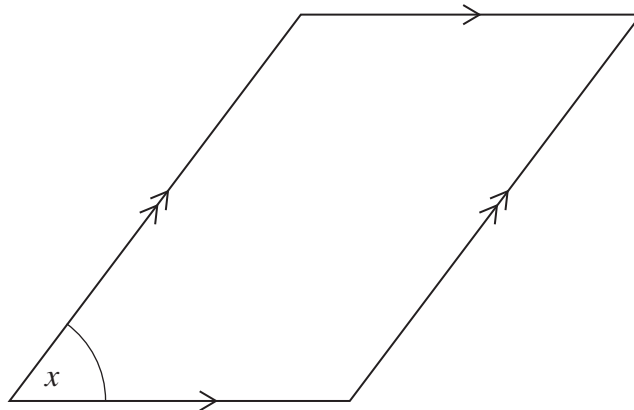
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$$3 + 2 \times 5 + 6 = 55$$

(1 mark)



11 A quadrilateral is drawn accurately below.
It has two pairs of parallel sides.



11 (a) How many lines of symmetry does this quadrilateral have?

Answer (1 mark)

11 (b) Write down the mathematical name for the quadrilateral.

Answer (1 mark)

11 (c) Mark an obtuse angle on the diagram.
Label it y .

(1 mark)

11 (d) Measure the length of one of the longer sides of the quadrilateral.

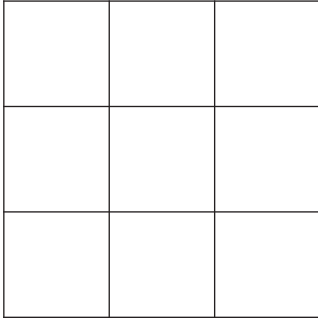
Answercm (1 mark)

11 (e) Measure the size of angle x .

Answerdegrees (1 mark)

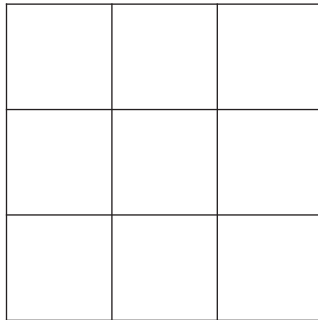


12 (a) On the grid below shade four squares so that the shaded shape has rotational symmetry of order four.



(1 mark)

12 (b) On the grid below shade two squares so that the shaded shape has one line of symmetry



(1 mark)

12 (c) Edith says that an isosceles triangle has rotational symmetry of order three.

Why is Edith wrong?

.....
.....

(1 mark)



13 When teams play football the goal difference is the subtraction

total number of goals scored in all matches – total number of goals conceded in all matches

13 (a) After ten matches the results for four teams are shown below.

For example, after ten matches Team A has scored 17 goals and conceded 33
Their goal difference is $17 - 33 = -16$

Complete the table.

Team	Number of goals scored	Number of goals conceded	Goal difference
A	17	33	- 16
B	25	21	4
C	11	20	
D	15		- 11

(2 marks)

13 (b) In the next match Team A plays, they score 3 goals and concede 1 goal.

What is the new goal difference for Team A?

.....

Answer (1 mark)

Turn over for the next question



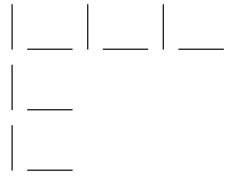
14 These patterns are made from sticks.



Pattern 1



Pattern 2



Pattern 3

14 (a) Draw Pattern 4.

(1 mark)

14 (b) Complete the table.

Pattern Number	1	2	3	4	5
Number of sticks	3	7	11		

(2 marks)

14 (c) Write down a rule for continuing the patterns.

.....

(1 mark)

14 (d) Explain why you **cannot** make one of these patterns with exactly 32 sticks.

.....

(1 mark)



15 Jane needs 250 kg of wood chip for her garden.
At the garden centre she can buy it in two ways, in bags or a single load that is delivered.

One bag weighs 25 kg and costs £2.85
She takes the bags home in her van

A single load weighs 250 kg and costs £17
The delivery charge is £10

Which is the cheaper way of buying the 250 kg of wood chip?

Show all your working.

.....
.....
.....
.....
.....
.....

Answer (4 marks)

16 (a) Simplify $7a + 8a - 6a$

.....

Answer (1 mark)

16 (b) Insert the symbols $+$ or $-$ so that the statement is correct.

$7a \dots 8f \dots 6a \dots 5f = 13a - 3f$ (2 marks)

