1 The numbers in this sequence **increase** by 45 each time.
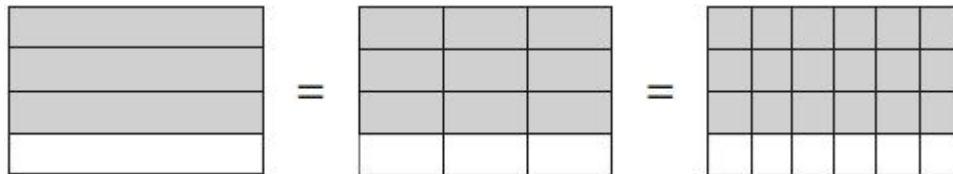
Write the missing numbers.

☐ 155 200 245 ☐ ☐

<div align="right">2 marks</div>
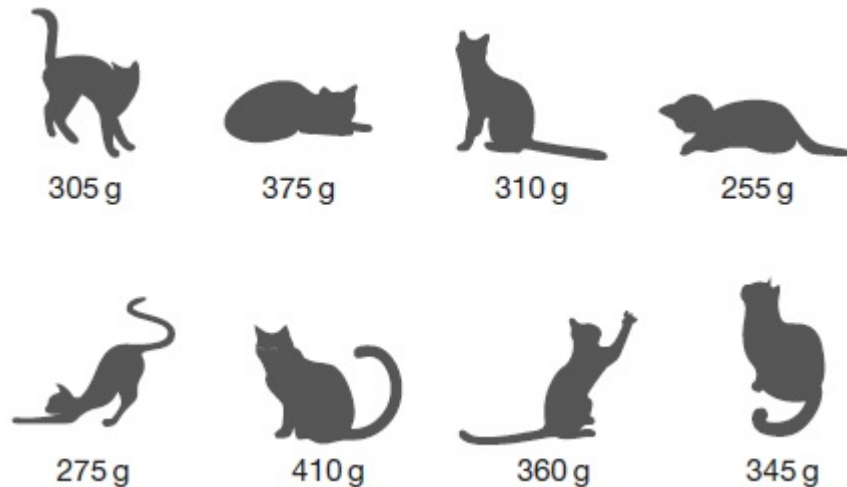
2 These diagrams show three equivalent fractions.

Write the missing values.

$$\frac{3}{4} = \frac{9}{\Box} = \frac{\Box}{24}$$

<div align="right">1 mark</div>

3 This picture shows the masses of eight kittens.

305 g   375 g   310 g   255 g

275 g   410 g   360 g   345 g

What is the **difference** in mass between the heaviest kitten and the lightest kitten?

☐ g

<div align="right">1 mark</div>

The masses of the kittens are to be put in four groups.

Write the missing numbers in the table.

One has been done for you.

Mass in g	Number of kittens
250-299	
300-349	
350-399	
400-449	1

1 mark

4 William wants to travel to Paris by train.

He needs to arrive in Paris by **5:30 pm**.

Circle the **latest time** that William can leave London.

Leaves London	Arrives Paris
12:01	15:22
12:25	15:56
13:31	16:53
14:01	17:26
14:31	17:53
15:31	18:53
16:01	19:20

1 mark

5 Adam has this rectangular piece of card. It is marked with grid lines.
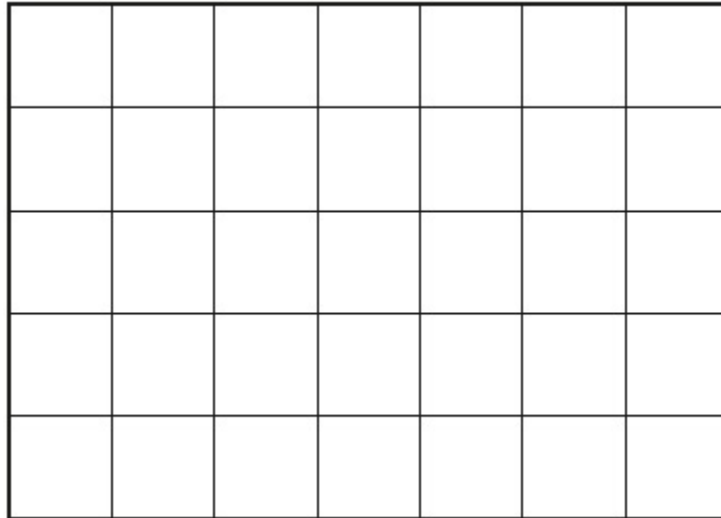
Adam makes two straight cuts along the grid lines.

The two cuts divide the rectangle into 3 shapes:

- 2 squares of **different** size, and

- 1 rectangle.

Using the grid lines, draw **two** lines that show where Adam could have made his cuts.
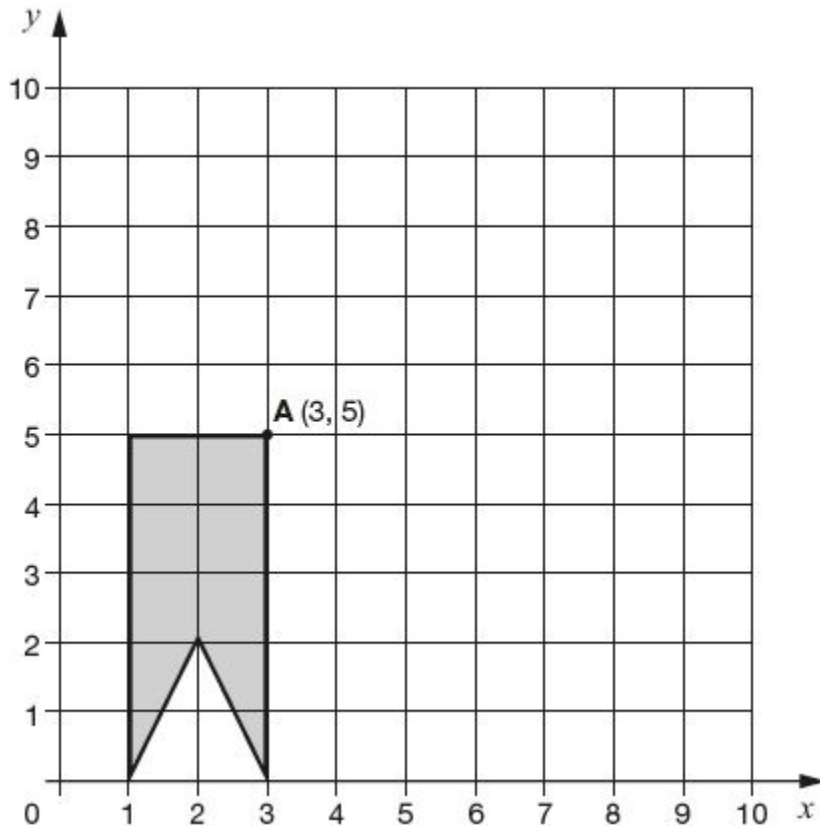
Use a ruler.

1 mark

6

Here is a shape on a grid.

The shape is translated so that point **A** moves to (7, 8).

Draw the shape in its new position.

Use a ruler.

A (3, 5)

1 mark

7

Here are four number cards.

2   3   4   7

Layla uses each card once to make a four-digit number.

She places:

*   4 in the tens column

*   2 so that it has a higher value than any of the other digits

*   the remaining two digits so that 7 has the higher value.

Write a digit in each box to show Layla's number.

1 mark

8 How many days are there in September, October and November altogether?

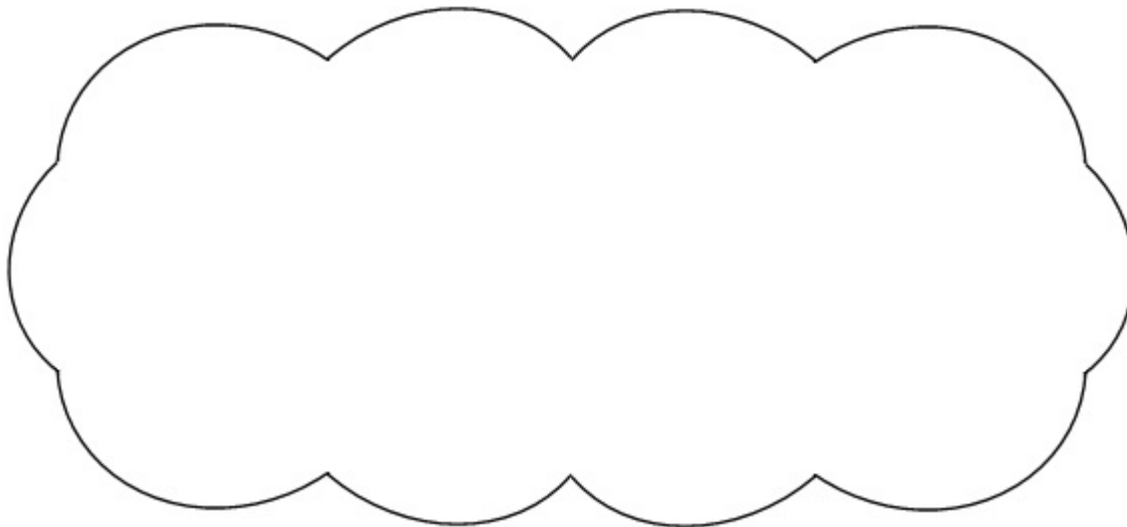|	days

1 mark

9 Kirsty says,

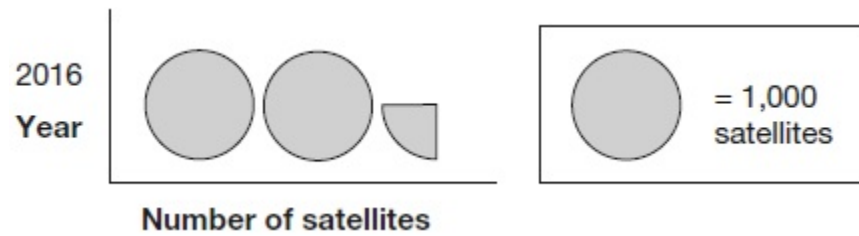> When you double the size of an acute angle, you always get an obtuse angle.

Explain why Kirsty is **not** correct.

1 mark

10 This pictogram shows the number of satellites above the Earth in 2016.

How many satellites were above the Earth in 2016?

1 mark

11 Amina asked 60 children to choose their favourite flavour of jelly.

These were her results.

Flavour	Number of children
Raspberry	12
Lemon	8
Orange	15
Blackcurrant	25
Total	**60**

What **percentage** of the 60 children chose orange?

%

1 mark

12 Here are five numbers.

$\cancel{2}$ 3   4   5   6

Write each number on the correct cards.

The number 2 has been written on the correct cards for you.

Prime numbers	Factors of 12	Factors of 15
2	2	

2 marks

13

3,576,219

Which digit is in the **ten thousands** place?

1 mark

Round 3,576,219 to the **nearest million**.

1 mark

14 Chen uses these digit cards.

| 5 | 6 | 9 |

She makes a 2-digit number and a 1-digit number.

She multiplies them together.

Her answer is a **multiple of 10**

What could Chen's multiplication be?

☐☐ × ☐

1 mark

15 Here are the temperatures in four cities at midnight and at midday.

City	Temperature	
	At midnight	**At midday**
Paris	−4°C	−2°C
Oslo	−13°C	−7°C
Rome	3°C	10°C
Warsaw	−6°C	2°C

At **midnight**, how many degrees colder was Paris than Rome?

☐ degrees

1 mark

Which city was 6 degrees colder at midnight than at midday?

_____

1 mark