2019 Paper 2 Question 1

In this grid, there are four multiplications.
Write the three missing numbers.

4	×	8	=	
×		×		
3	×		=	21
=		=		
		56		

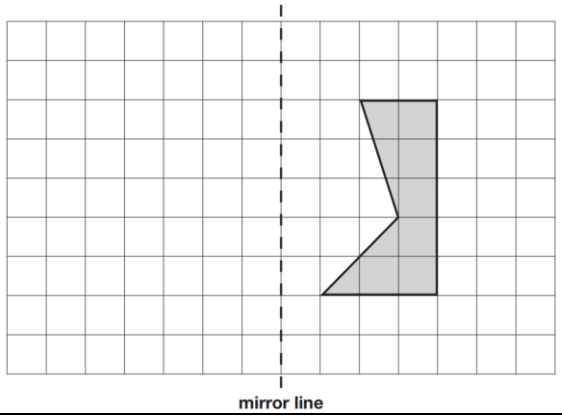
2019 Paper 2 Question 3

Order the numbers starting with the largest.
Match each number with its order.

1,009,909	1st	largest
1,023,065	2nd	
1,009,099	3rd	
1,230,650	4th	smallest

2019 Paper 2 Question 4

Here is a shaded shape on a square grid.
Reflect the shape in the mirror line.



2019 Paper 2 Question 2

What number is 1,000 less than 9,072?

2019 Paper 2 Question 5

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

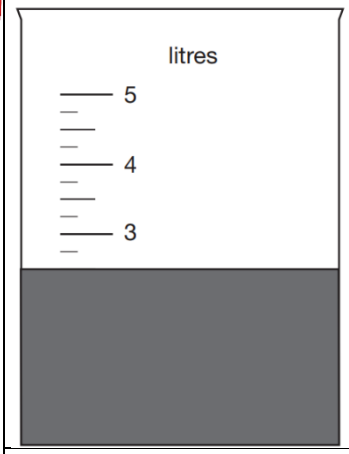
☐ 155 200 245 ☐ ☐

2019 Paper 2 Question 6

Write the missing number to make this division correct.

0.3 ÷ ☐ = 0.03

2019 Paper 2 Question 7



Jack pours some dark paint into a container.
In litres, how much paint is in the container?

2019 Paper 2 Question 8

In this sequence, the rule to get the next number is: Multiply by 2, and then add 3
Write the missing numbers.

	25	53	

2019 Paper 2 Question 9

Jack chose a number.

- **He multiplied the number by 7**
- **Then he added 85**
- **His answer was 953**

What number did Jack choose?

2019 Paper 2 Question 10

A theme park sells tickets online.

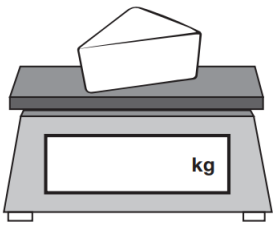
- **Each ticket costs £24**
- **There is a £3 charge for buying tickets.**

Which of these shows how to calculate the total cost, in pounds?

number of tickets × 3 + 24 ☐
number of tickets × 24 + 3 ☐
number of tickets + 3 × 24 ☐
number of tickets + 24 × 3 ☐

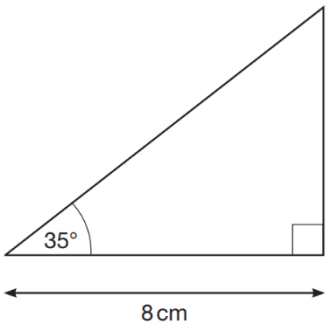
2019 Paper 2 Question 11

Amina is shopping. She says, 'I would like to buy one-quarter of a kilogram of cheese.'
Write one-quarter on the scales as a decimal.



The cheese costs £1.35
Amina pays with a £2 coin.
How much change should Amina get?

2019 Paper 2 Question 13



Here is a sketch of a triangle. It is not drawn to scale.
Draw the full-size triangle accurately below.
Use an angle measurer (protractor) and a ruler.
One line has been drawn for you.

8 cm

2019 Paper 2 Question 12

Here are three symbols.

< > =

Write one symbol in each box to make the statements correct.

$\frac{7}{10}$ ☐ 0.07

$\frac{23}{1000}$ ☐ 0.23

2019 Paper 2 Question 14

Complete the table.

	Round 39,476
to the nearest 10,000	
to the nearest 1,000	
to the nearest 100	

2019 Paper 2 Question 15

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?

2019 Paper 2 Question 16

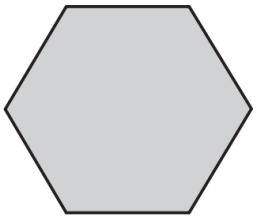
Write the missing number.

$6 + 2 \times 2 - \square = 6$

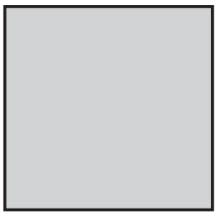
2019 Paper 2 Question 17

These two shapes have the same perimeter.
The length of each side of the hexagon is 8 centimetres.

regular hexagon



square



Calculate the area of the square.

2019 Paper 2 Question 18

Circle the prime number.

95 89 87

Explain how you know the other numbers are not prime.

2019 Paper 2 Question 19

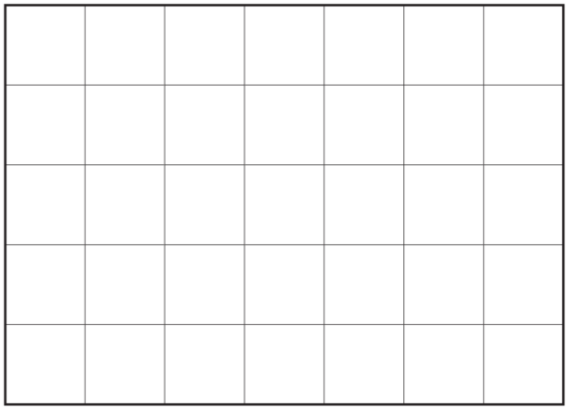
A machine pours 250 millilitres of juice every 4 seconds. How many litres of juice does the machine pour every minute?

2019 Paper 2 Question 21

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.



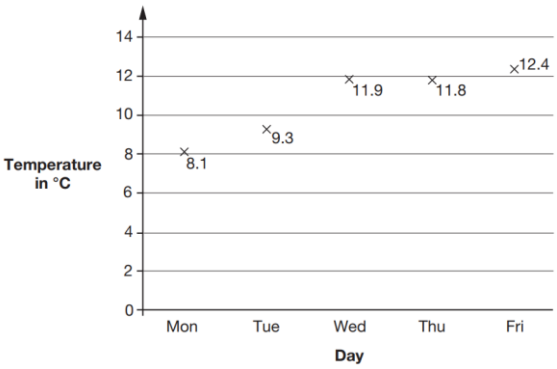
2019 Paper 2 Question 20

Tick the fractions that are equal to 20%.

$\frac{1}{20}$ $\frac{20}{40}$ $\frac{1}{5}$ $\frac{3}{15}$ $\frac{2}{100}$

2019 Paper 2 Question 22

This graph shows the maximum temperature for five days.

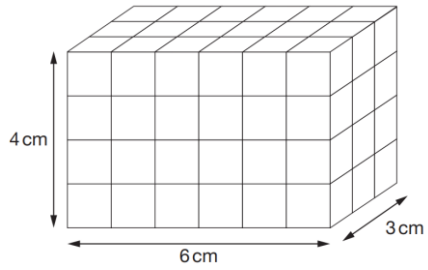


For what fraction of the five days was the maximum temperature below 10 °C?

What was the mean maximum temperature, to one decimal place?

2019 Paper 2 Question 23

Amina made this cuboid using centimetre cubes.



Stefan makes a cuboid that is 5 cm longer, 5 cm taller and 5 cm wider than Amina's cuboid. What is the difference between the number of cubes in Amina's and Stefan's cuboids?

2019 Paper 3 Question 1

The original price of this car is £8,999

What is the sale price of the car?

2019 Paper 3 Question 2

3,576,219

Which digit is in the ten thousands place?

Round 3,576,219 to the nearest million.

2019 Paper 3 Question 3

Dev says, 'I had £10. I gave some money away.'
Which expression shows how much money Dev has left?
a **is the amount of money, in pounds, that Dev gave away.**

$10 + a$	☐
$10 \div a$	☐
$a - 10$	☐
$10 - a$	☐
$a \times 10$	☐

2019 Paper 3 Question 4

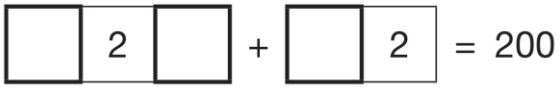
Write these masses in order, starting with the lightest.

1.25 kg 0.99 kg 1.025kg 0.009 kg

kg	kg	kg	kg
lightest			

2019 Paper 3 Question 5

Write the missing digits to make this addition correct.



2019 Paper 3 Question 6

John buys one toy car and one pack of stickers.

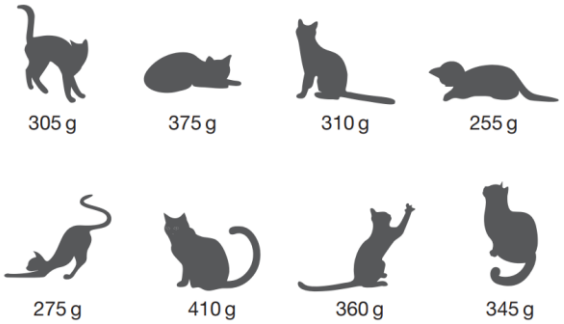
£1.49

£1.64

He pays with a £10 note. How much change does John get?

2019 Paper 3 Question 7

This picture shows the masses of eight kittens.



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

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.

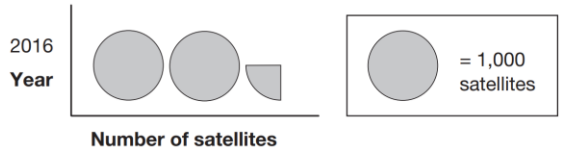
Mass in g	Number of kittens
250–299	
300–349	
350–399	
400–449	1

2019 Paper 3 Question 8

Ken is playing a game. He has 4,289 points.
Then he scores another 355 points.
Ken's target is 6,000 points.
How many more points does Ken need to reach his target?

2019 Paper 3 Question 9

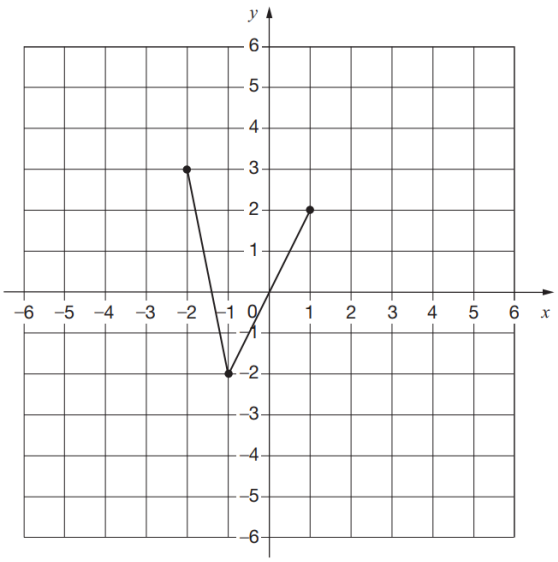
This pictogram shows the number of satellites above the Earth in 2016.



How many satellites were above the Earth in 2016?

2019 Paper 3 Question 10

On the grid there are three points joined by two lines.



Lara plots another point on the grid at (–1, 2). She joins the points to make a quadrilateral. Complete Lara's quadrilateral on the grid.

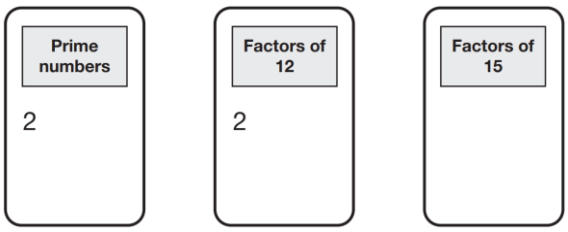
Then Lara translates the quadrilateral 4 squares to the right. Draw the quadrilateral in its new position on the grid.

2019 Paper 3 Question 11

Here are five numbers.

2 3 4 5 6

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



2019 Paper 3 Question 12

Amina's bed is 190 cm in length and 91 cm in width. She is making a one-tenth scale model of the bed. What are the length and width of Amina's model?

2019 Paper 3 Question 13

Kirsty says, 'When you double the size of an acute angle, you always get an obtuse angle.' Explain why Kirsty is not correct.

2019 Paper 3 Question 14

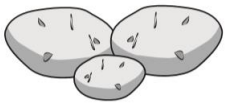
How many days are there in September, October and November altogether?

2019 Paper 3 Question 15

The International Space Station orbits the Earth at a height of 250 miles.
What is the height of the International Space Station in kilometres?
Use 8 kilometres equals 5 miles.

2019 Paper 3 Question 16

carrots
£1.80 per kg



potatoes
£1.50 per kg

Jack buys 1 ½ kg of potatoes and ½ kg of carrots. How much change does he get from £5?

2019 Paper 3 Question 17

x + 2y = 20

x and y are whole numbers less than 10
What could x and y be?

x = _____ y = _____

2019 Paper 3 Question 18

Tick the fractions less than $\frac{5}{8}$

$\frac{1}{2}$ $\frac{2}{8}$ $\frac{3}{4}$ $\frac{7}{16}$ $\frac{24}{32}$

2019 Paper 3 Question 19

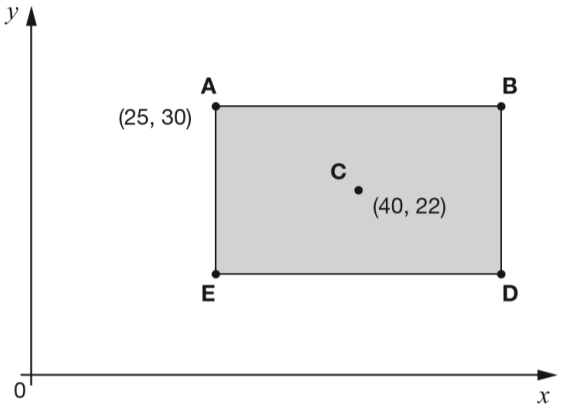
Layla makes jewellery to sell at a school fair.
Each bracelet has 53 beads.
She makes 68 bracelets.
Each necklace has 105 beads.
She makes 34 necklaces.
How many beads does Layla use altogether?

2019 Paper 3 Question 20

Adam is making booklets. Each booklet must have 34 sheets of paper. He has 2 packets of paper. There are 500 sheets of paper in each packet. How many complete booklets can Adam make from 2 packets of paper?

2019 Paper 3 Question 21

ABDE is a rectangle on coordinate axes.
The sides of the rectangle are parallel to the axes.

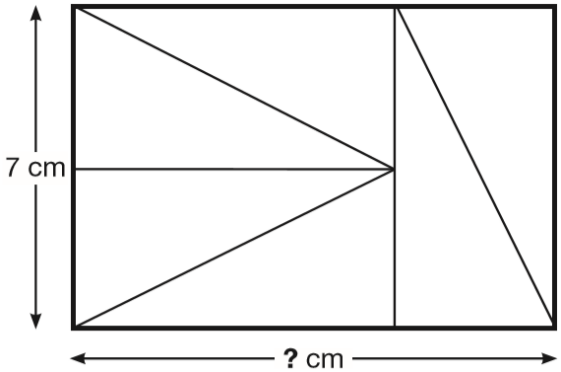


Point C is the centre of the rectangle.
What are the coordinates of B and D?

B is (,) D is (,)

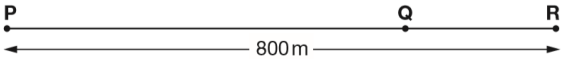
2019 Paper 3 Question 22

Six identical right-angled triangles are arranged to make a rectangle.



Calculate the length of the rectangle.

2019 Paper 3 Question 23



The distance from point P to point R is 800 metres. The distance from point P to point Q is 4 times the distance from point Q to point R.
Olivia says, 'It is 600 metres from point P to point Q.'
Explain why Olivia is not correct.