

Answer ALL TWENTY FOUR questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

- 1 (a) Write $\frac{23}{100}$ as a decimal.

(1)

- (b) Write 0.7 as a percentage.

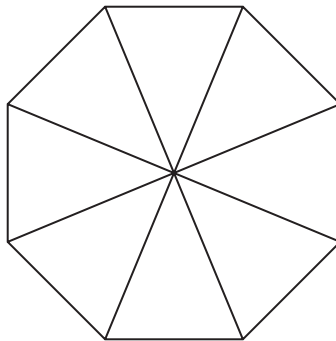
%

(1)

- (c) Write $\frac{1}{5}$ as a decimal.

(1)

- (d) Shade 75% of this diagram.



(1)

21% of the people on a train are asleep.

- (e) What percentage of the people on the train are not asleep?

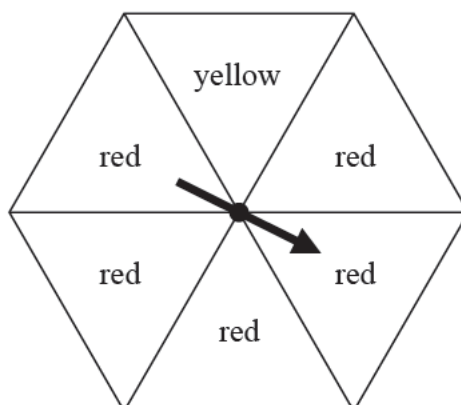
%

(1)

(Total for Question 1 is 5 marks)



2 The diagram shows a fair spinner.



Mikail spins the arrow on the spinner once.

impossible	unlikely	evens	likely	certain
------------	----------	-------	--------	---------

(a) Write down the word from the box that best describes the likelihood that the arrow will land on

(i) red,

(ii) blue.

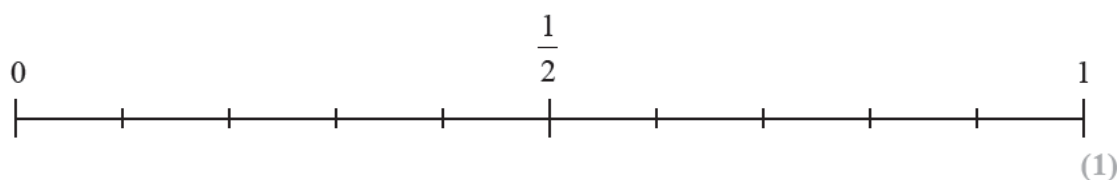
(2)

10 balls are in a bag.

3 of these balls are green.

Jill takes at random a ball from the bag.

(b) On the probability scale below, mark with a cross (×) the probability that the ball is green.



(1)

(Total for Question 2 is 3 marks)



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

3 Mike buys 150 burger buns.

He buys the burger buns in packs of 6 burger buns.
Each pack of 6 burger buns costs £1.03

Work out how much Mike pays for the 150 burger buns.

£

(Total for Question 3 is 3 marks)

4 (a) Simplify $4m + 2m - m$

(1)

(b) Simplify $5p \times 7$

(1)

(c) Solve $8g = 40$

$g =$ (1)

(d) Solve $19 - k = 4$

$k =$ (1)

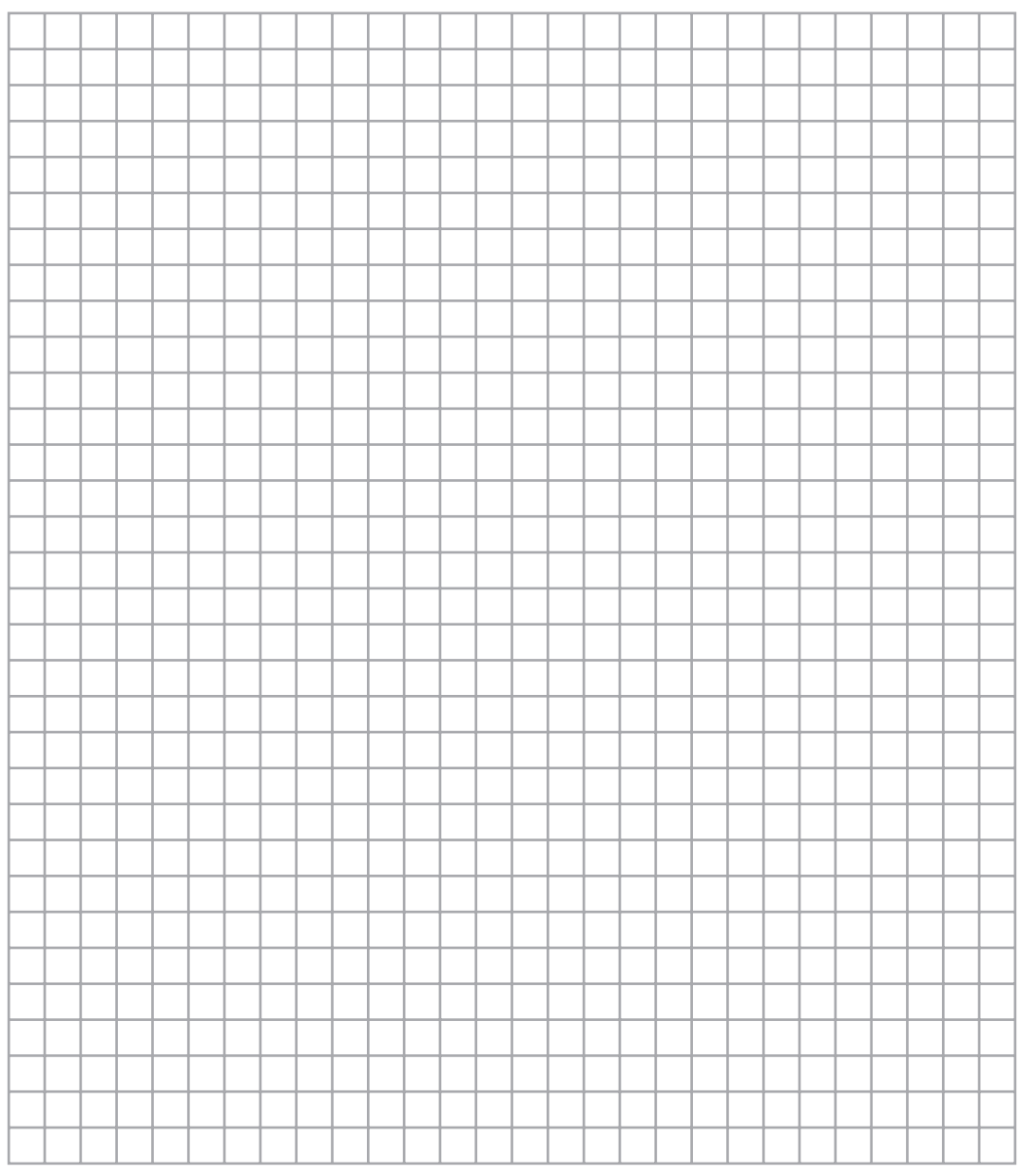
(Total for Question 4 is 4 marks)



5 The table shows the average monthly temperatures, in °C, for four months in London and in Cairo.

	January	April	July	October
London (°C)	5	11	19	13
Cairo (°C)	14	21	28	23

Show this information by drawing a suitable diagram on the grid below.



(Total for Question 5 is 4 marks)



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

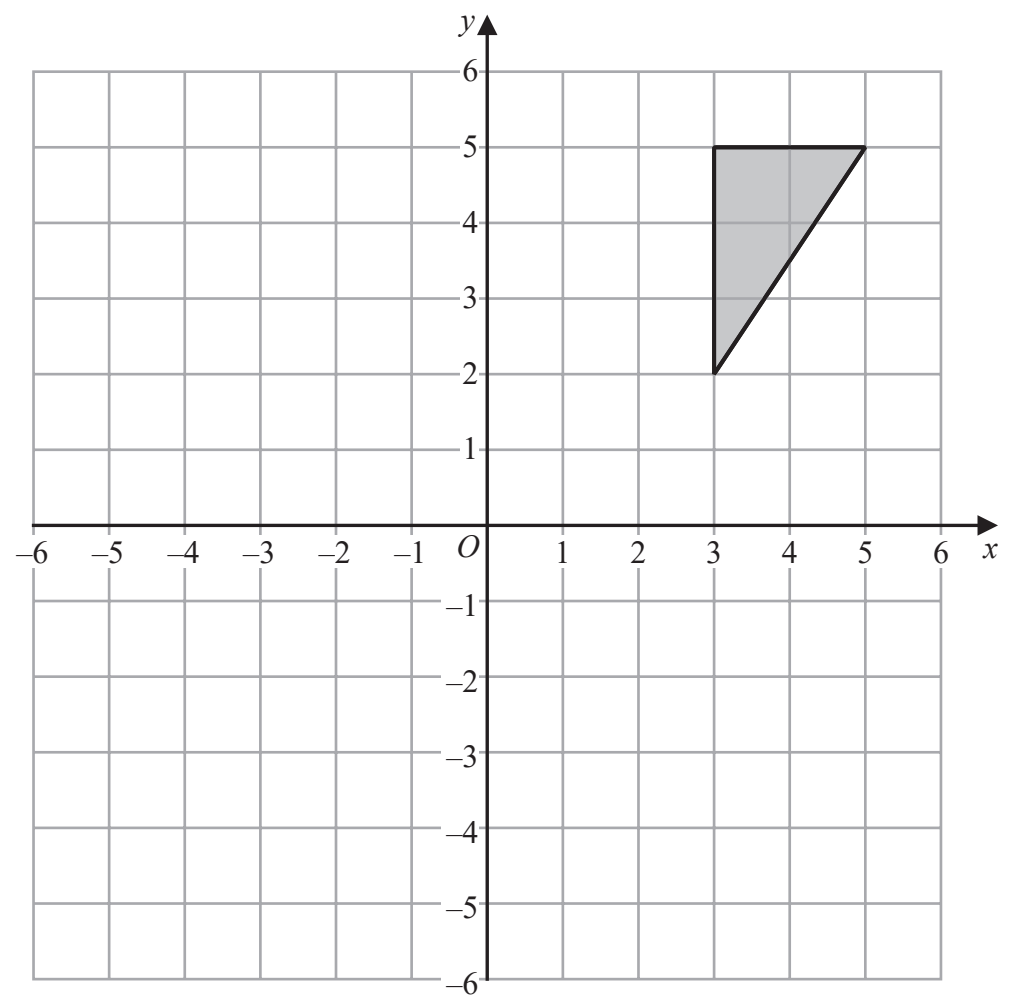
6 Steve throws a 6-sided dice.
The dice can land on 1 or on 2 or on 3 or on 4 or on 5 or on 6

He also spins a coin.
The coin can land on heads (H) or on tails (T).

List all the possible combinations he could get.

(Total for Question 6 is 2 marks)

7



Reflect the shaded triangle in the line $y = 1$

(Total for Question 7 is 2 marks)



- 8 (a) Write $\frac{19}{5}$ as a mixed number.

(1)

There are 84 animals in a field.

10 of the animals are horses.

45 of the animals are sheep.

The rest of the animals are cows.

- (b) What fraction of the animals in the field are cows?

(2)

- (c) Write these fractions in order of size.
Start with the smallest fraction.

$$\frac{3}{4} \quad \frac{11}{12} \quad \frac{5}{8} \quad \frac{9}{20}$$

(2)

- (d) Show that $\frac{23}{24} - \frac{3}{8} = \frac{7}{12}$

(2)

(Total for Question 8 is 7 marks)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

9 Sahil has a fish tank in the shape of a cuboid, as shown in the diagram.

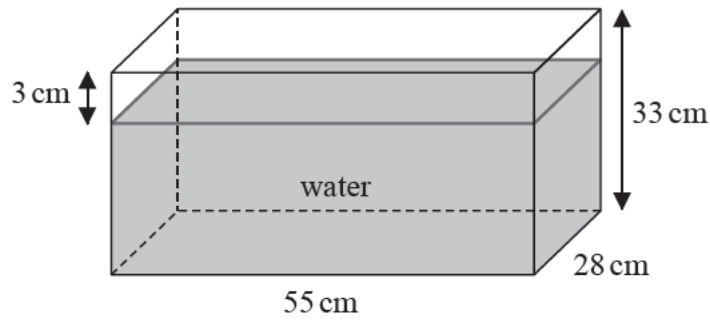


Diagram **NOT** accurately drawn

The tank is

- 55 cm long
- 28 cm wide
- 33 cm high

The surface of the water in the tank is 3 cm below the top of the tank.

Sahil is going to put some neon tetra fish in his tank.

He must allow 4 litres of water for each of the neon tetra fish he puts in the tank.

What is the greatest number of neon tetra fish Sahil can put in his tank?

(Total for Question 9 is 4 marks)

