Q1.

Write these in order of size, starting with the smallest.

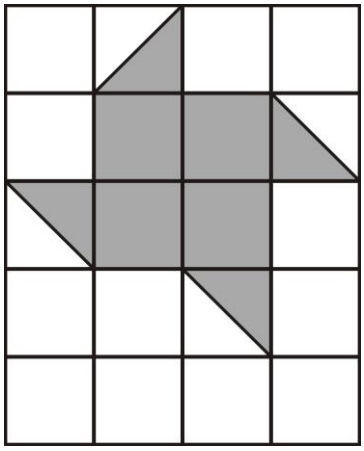
$\frac{3}{4}$ 0.34 0.7 43%

smallest

1 mark

Q2.

Here is a grid of 20 squares.



What percentage of the grid is shaded?

%

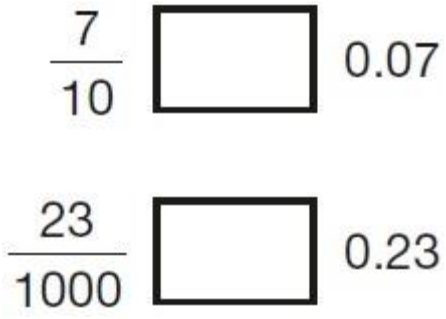
1 mark

Q3.

Here are three symbols.

< > =

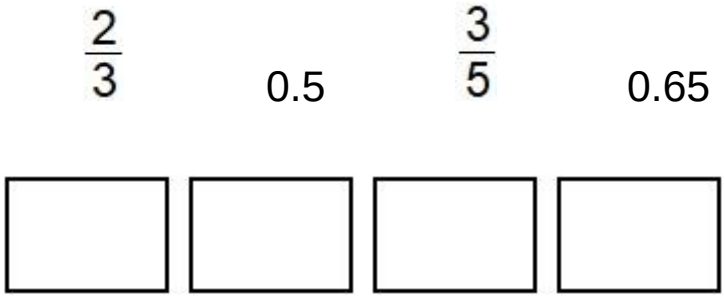
Write one symbol in each box to make the statements correct.



1 mark

Q4.

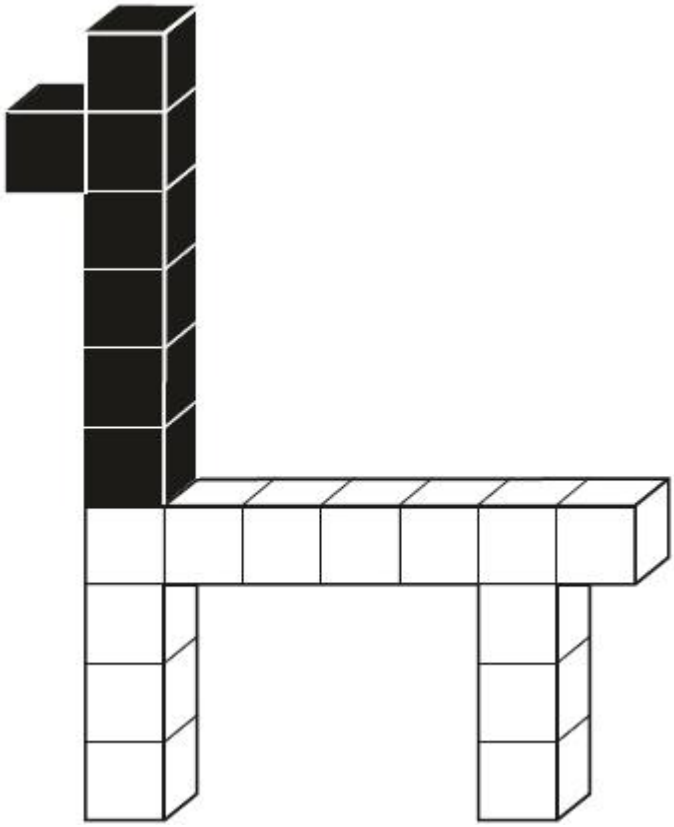
Write these in order of size, starting with the smallest.



1 mark

Q5.

This model is made with 20 cubes.



What **percentage** of the cubes in the model is black?

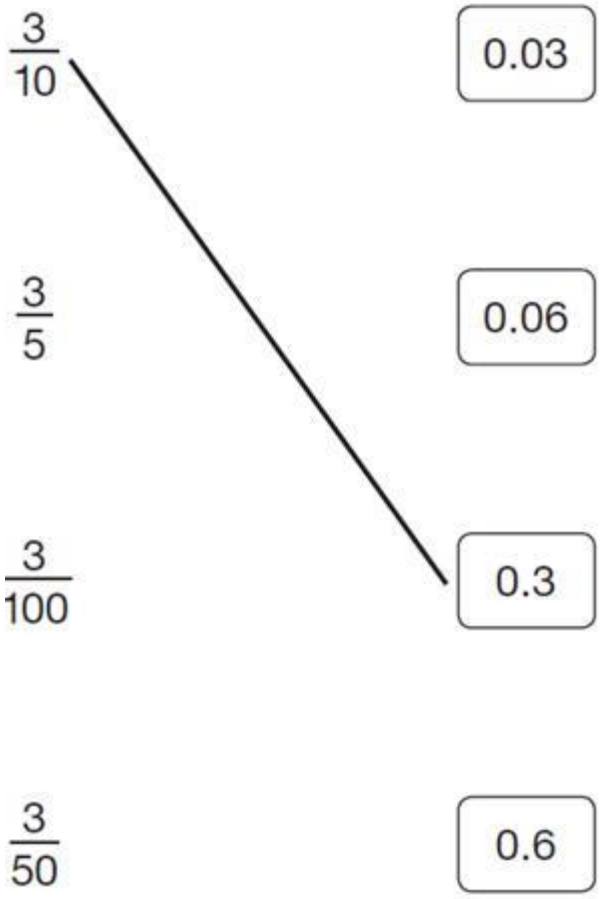
%

1 mark

Q6.

Join each fraction to the correct decimal card.

The first one has been done for you.



1 mark

Q7.

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**

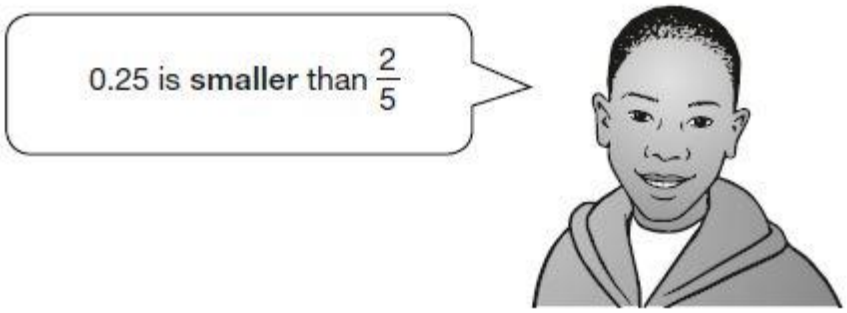
What **percentage** of the 60 children chose orange?

%

1 mark

Q8.

Adam says,



Explain why he is correct.

1 mark

Q9.

A cat sleeps for **12 hours** each day.

50% of its life is spent asleep.

Write the missing percentage.

A koala sleeps for **18 hours** each day.

[ ] % of its life is spent asleep.

1 mark

Q10.

Put a tick (✓) in **each row** to complete this table.

One has been done for you.

	greater than $\frac{1}{2}$	less than $\frac{1}{2}$
0.9	✓	
0.06		
$\frac{11}{20}$		
0.21		

2 marks

Q11.

What is 10% of a half?

1 mark

What percentage of 20 is 19?

%

1 mark

Q12.

In each box, circle the number that is **greater**.

$1\frac{1}{2}$	1.2
$1\frac{1}{4}$	1.3

$1\frac{5}{100}$	1.4
$1\frac{3}{5}$	1.5

2 marks

Q13.

Tick the fractions that are **equal** to 20%.

$\frac{1}{20}$ ☐

$\frac{20}{40}$ ☐

$\frac{1}{5}$ ☐

$\frac{3}{15}$ ☐

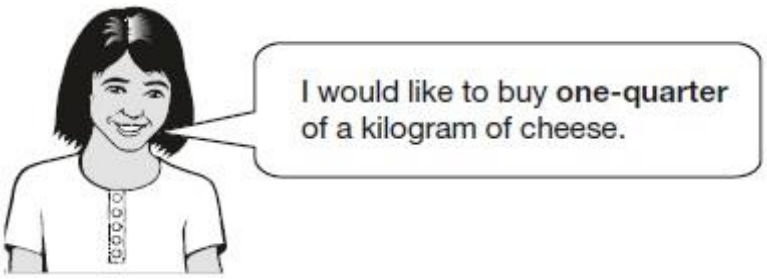
$\frac{2}{100}$ ☐

2 marks

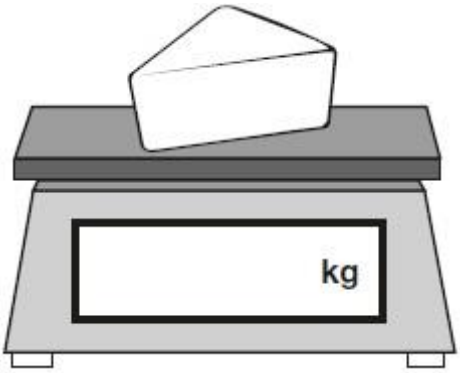
Q14.

Amina is shopping.

She says,



Write one-quarter on the scales as a decimal.



1 mark

The cheese costs £1.35

Amina pays with a £2 coin.

How much change should Amina get?

1 mark

Q15.

Tick the **two** numbers that are equivalent to $\frac{1}{4}$

Tick **two**.

0.25 ☐

0.75 ☐

$\frac{25}{100}$ ☐

0.5 ☐

$\frac{2}{5}$ ☐

1 mark

Mark schemes

Q1.

Numbers in order as shown:

0.34	43%	0.7	$\frac{3}{4}$

Accept use of equivalent fractions, decimals or percentages, eg 0.34, 0.43, 0.7, 0.75

[1]

Q2.

30%

Do not *accept equivalent fractions or decimals.*

[1]

Q3.

Both symbols correct, as shown:

$\frac{7}{10}$	>	0.07
$\frac{23}{1000}$	<	0.23

[1]

Q4.

Numbers in order, as shown:

0.5 $\frac{3}{5}$ 0.65 $\frac{2}{3}$

Accept equivalent decimals, percentages or fractions.

[1]

Q5.

35%

[1]

Q6.

Fractions connected correctly to decimals as shown:

[1]

Q7.

25

[1]

Q8.

An explanation showing that 0.25 is less than $\frac{2}{5}$, e.g.

- $\frac{2}{5}$ is $0.4 > 0.25$
- 0.25 is $\frac{5}{20} < \frac{8}{20}$
- 0.25 is 25% and $\frac{2}{5}$ is 40% and 25% is smaller than 40%
- 0.25 is a quarter.

  You need 8 quarters to make 2, but only 5 lots of $\frac{2}{5}$ to make 2
- $\frac{2}{5} = 0.4$
- $\frac{1}{4}$ is $\frac{1}{4}$ smaller than a half, but $\frac{2}{5}$ is only $\frac{1}{10}$ smaller, so $\frac{1}{4}$ is smaller than $\frac{2}{5}$

***Do not** accept vague, incomplete or incorrect explanations, e.g.*

- *Because $\frac{1}{4}$ is bigger than $\frac{2}{5}$*
- *Because $\frac{1}{4}$ comes first on a number line*
- *Because 0.25 is $\frac{1}{4}$*

Accept $\frac{2.5}{10}$ *a* $\frac{4}{10}$ *n equivalent to* $\frac{1}{4}$ *in an explanation when comparing to*

[1]

Q9.

75

[1]

Q10.

Award **TWO** marks for the table correctly completed as shown:

✓	
	✓
✓	
	✓

If the table is not correctly completed award **ONE** mark for any two out of three ticks correct.

Do not *accept any row that has both columns ticked.*

Accept unambiguous alternatives to ticks, eg 'yes'.

Up to 2

[2]

Q11.

(a) $\frac{1}{20}$ or equivalent

Accept equivalent fractions, decimals or percentages, eg:

- *5%*
- *0.05*
- $\frac{5}{100}$

Do not accept *5 without a percentage sign*

1

(b) 95

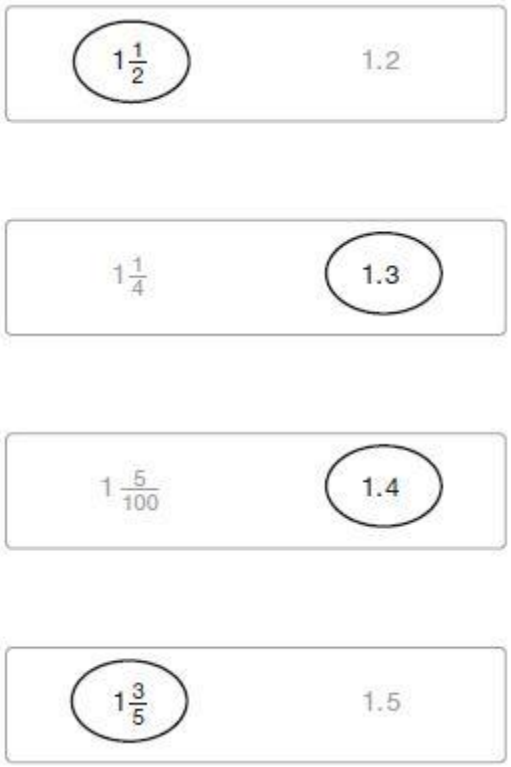
Do not accept *equivalent fractions or decimals*

1

[2]

Q12.

Award **TWO** marks for all four rows completed correctly as shown:



If the answer is incorrect, award **ONE** mark for three rows completed correctly.

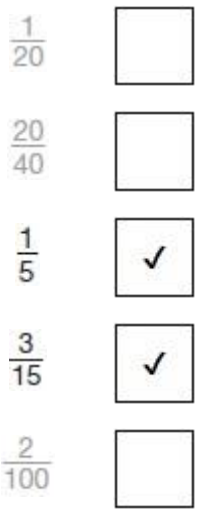
Accept alternative unambiguous positive indications of the correct numbers, e.g numbers ticked.

Up to 2m

[2]

Q13.

Award **TWO** marks for two boxes ticked correctly, as shown:



If the answer is incorrect, award **ONE** mark for:

- only **ONE** box ticked correctly and no incorrect boxes ticked

- **TWO** boxes ticked correctly and **ONE** incorrect box ticked.

Accept alternative unambiguous positive indication of the correct answer, e.g. Y.

Up to 2m

[2]

Q14.

(a) 0.25

Do not *accept* $\frac{1}{4}$ *or any other fraction*

1

(b) 65(p) **OR** (£)0.65

1

[2]

Q15.

Both boxes ticked, as shown:

Tick **two**.

0.25	✓
0.75	
$\frac{25}{100}$	✓
0.5	
$\frac{2}{5}$	

As pupils are told to select ***two*** *boxes, alternative unambiguous positive indications, e.g. Y, of the correct answer are accepted.*

Both correct boxes must be ticked for the award of the mark. No additional boxes must be ticked.

[1]