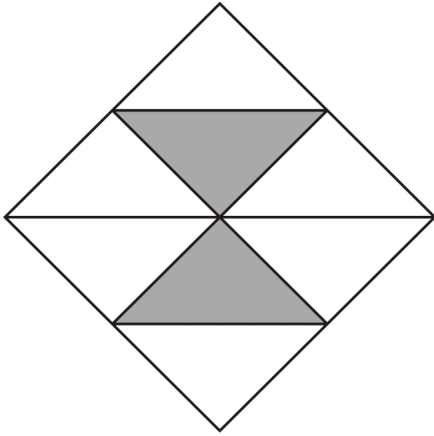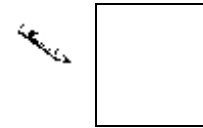**1** Here is a square.

What fraction of the square is shaded?

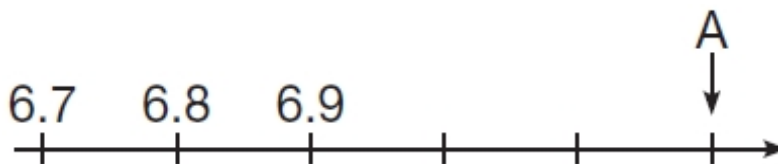☜ ☐

1 mark

2 Write these numbers in order, starting with the smallest.

0.6 $\frac{3}{10}$ 0.2 $\frac{9}{10}$
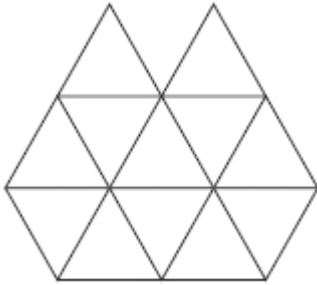
☐ ☐ ☐ ☐

smallest

1 mark

3

What number is marked at A?

✎ ☐

1 mark

4   Shade $\frac{1}{4}$ of this shape.
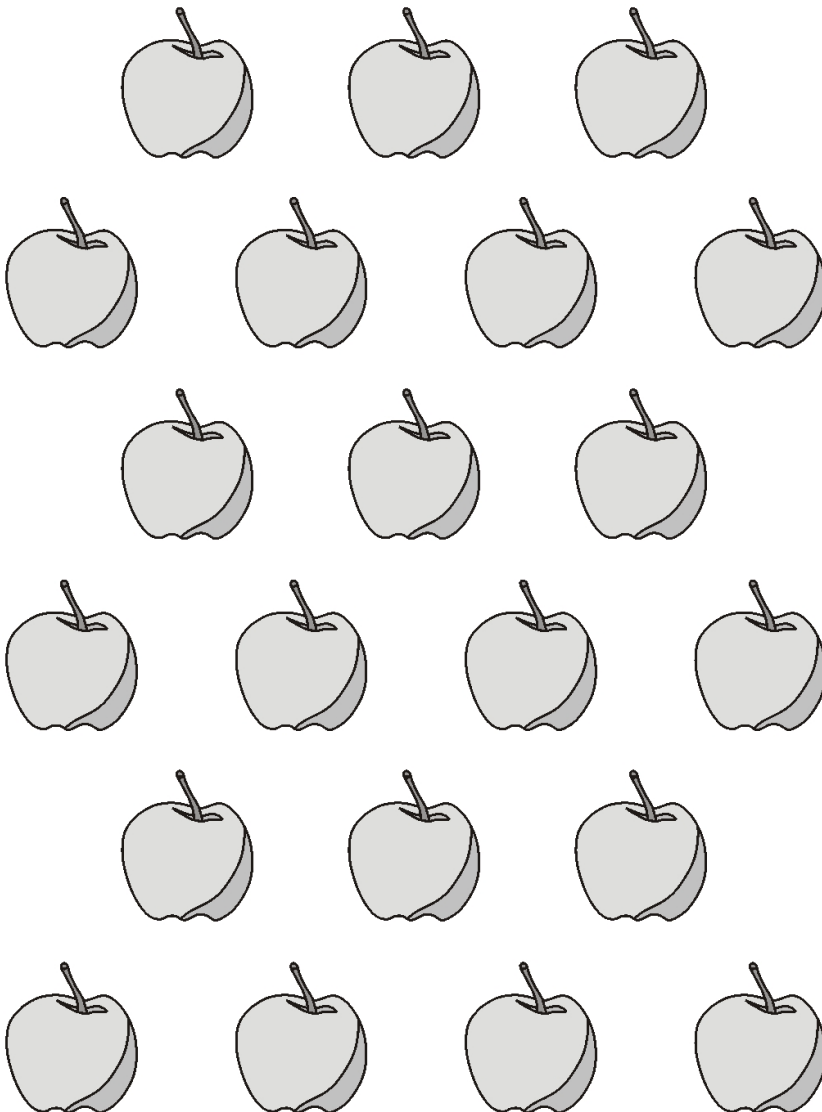
1 mark
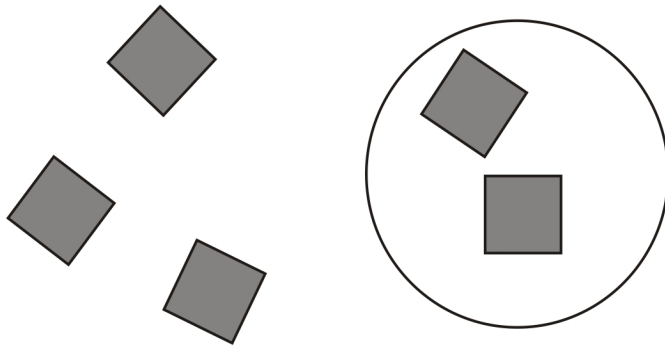
5   Here are 21 apples.

Put a ring around **one third** of them.

1 mark

6 What fraction of these tiles are circled?
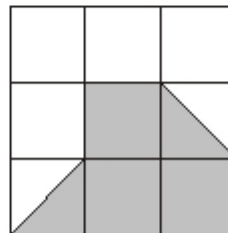
1 mark

7

$\frac{1}{5}$ of 20 =

1 mark

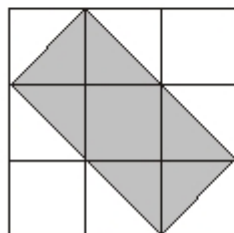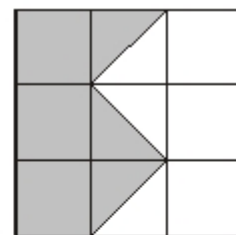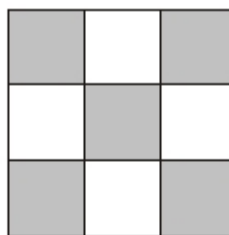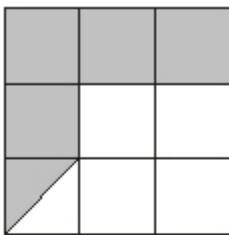**8** Here are five diagrams.

Look at each one.

Put a tick (✓) on the diagram if exactly $\frac{1}{2}$ of it is shaded.

Put a cross (✗) if it is not.

2 marks

9

Draw an arrow (↓) on the number line to show $1\frac{3}{4}$

1 mark

10

$\frac{2}{7} + \frac{3}{7} =$

1 mark

11

Here are three shapes made from regular hexagons.

Write the **fraction** of each shape that is shaded.
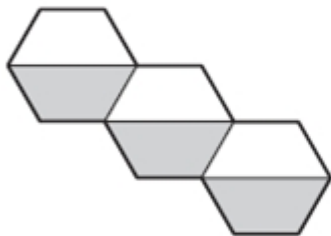
2 marks

12 Circle the **two** fractions that have the same value.

$$\frac{2}{10} \qquad \frac{1}{3} \qquad \frac{1}{2}$$

$$\frac{5}{10} \qquad \frac{1}{4}$$

1 mark

13 Write these numbers in order, starting with the smallest.

$$\frac{5}{7} \qquad \frac{2}{7} \qquad \frac{6}{7} \qquad \frac{3}{7}$$

smallest

1 mark

14 $\frac{3}{8}$ of a class are boys.

What **fraction** of the class are girls?

1 mark

15 Sarah has a packet of balloons.

The contents of the packet are

5 red balloons
5 blue balloons
10 yellow balloons

Sarah says,

'One-quarter of the balloons are red'.
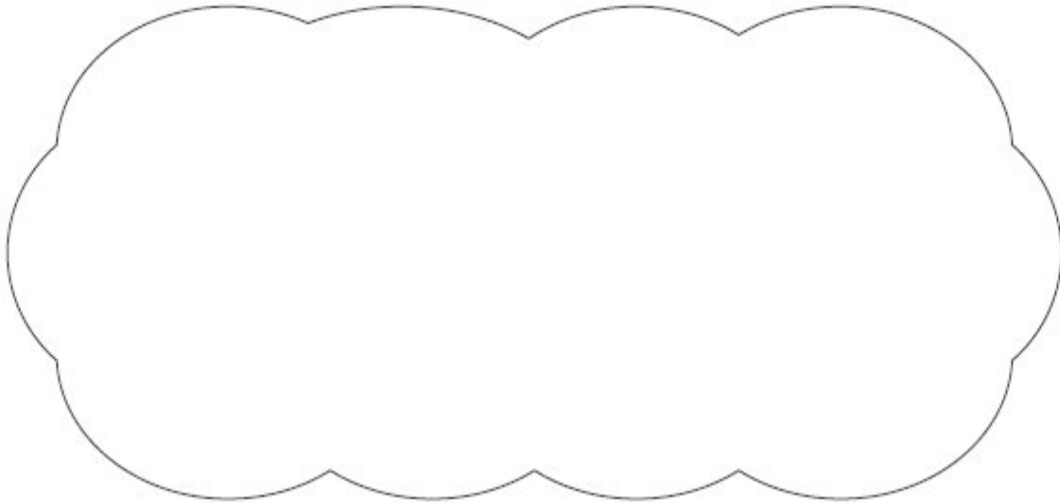
Is Sarah correct?
Circle **Yes** or **No**.
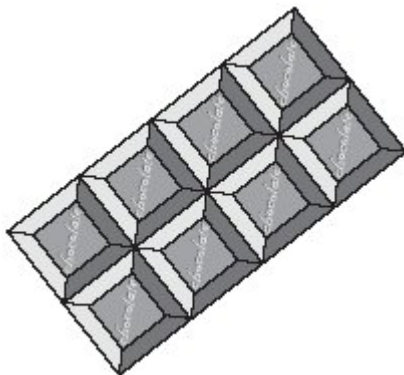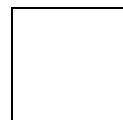
Yes / No

Explain how you know.

1 mark

16 Here is a chocolate bar.

William eats 3 pieces and Amber eats 2 pieces.

What **fraction** of the chocolate bar **remains**?

1 mark

Mark schemes

1 $\frac{1}{4}$ **OR** $\frac{2}{8}$

Accept equivalent fractions.

[1]

2 [10.2] [$^3/_{10}$] [0.6] [$^9/_{10}$]

Accept equivalent fraction or decimals,
e.g. 0.2, 0.3, 0.6, 0.9

[1]

3 7.2

[1]

4 Diagram completed to show three triangles shaded, or equivalent, eg

Accept inaccurate shading provided the intention is clear.

[1]

5 Ring drawn enclosing 7 apples.

Accept any other clear way of indicating 7 apples.
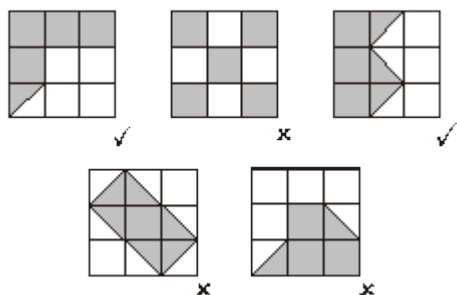
[1]

6 $\frac{2}{5}$

[1]

7 4

[1]

8 Award **TWO** marks for diagrams ticked or crossed as shown:

*If the answer is incorrect, award **ONE** mark for four diagrams ticked or crossed correctly.*

*Accept alternative unambiguous indications such as **Y** or **N**.*

*For **TWO** marks accept:*
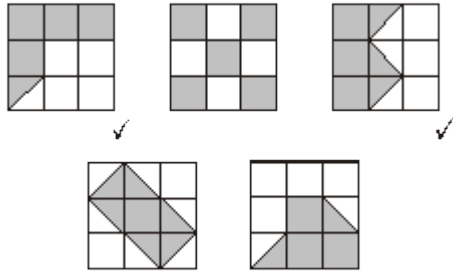
Up to 2

[2]

9 An arrow drawn on the number line as shown:

Accept any other clear way of indicating $1\frac{3}{4}$ on the number line as long as the intention is clear.

Accept slight inaccuracies, provided the intention is clear.

[1]

10 $\dfrac{5}{7}$

[1]

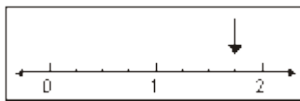**11** Award **TWO** marks for three fractions correct as shown:

$$\frac{1}{4}$$

AND

$$\frac{1}{2}$$

AND

$$\frac{1}{3}$$

If the answer is incorrect, award **ONE** mark for two fractions correct.

Accept equivalent fractions, eg

$\frac{3}{6}$ for $\frac{1}{2}$
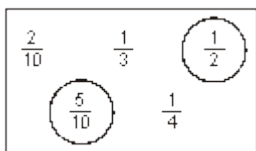
$\frac{2}{6}$ for $\frac{1}{3}$

Up to 2

[2]

12 Circles two fractions as shown:

Both *fractions must be correct for the award of the mark.*

Accept any other clear way of indicating the correct fractions, such as ticking or underlining.

[1]

13 $\frac{2}{7}$ $\frac{3}{7}$ $\frac{5}{7}$ $\frac{6}{7}$

[1]

14 $\frac{5}{8}$

[1]

15 An explanation which recognises that 5 is a quarter of 20, the total number of balloons, eg:

- ' $\frac{1}{4}$ are red, $\frac{1}{4}$ are blue and half are yellow'

- 'A quarter of 20 is 5'

- '5 out of 20'

- 'There are 20 balloons altogether and 5 are red so she is correct'.

    No mark is awarded for circling 'Yes' alone.

    Do not *accept vague or incomplete explanations, eg:*
    - *'5 are red, 5 are blue and 10 are yellow so that is a quarter'*
    - *'There are 20 altogether'*
    - *'Add all the balloons up and divide by 4'*

    If 'No' is circled but a correct, unambiguous explanation is given, then award the mark.

    U1

    [1]

16 $\frac{3}{8}$

Accept equivalent fractions or decimals, eg 0.375

[1]