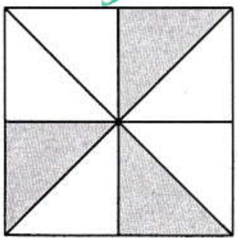
1 [2014]

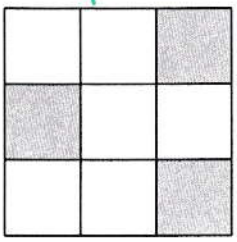
Each of these diagrams is divided into equal parts.
Some of the parts are shaded.

$\frac{3}{8}$



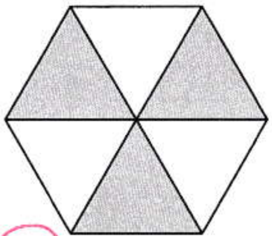
A

$\frac{3}{9} = \frac{1}{3}$

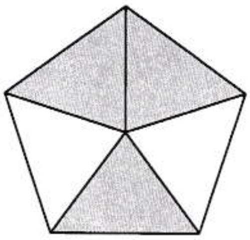


B

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

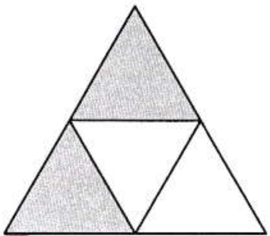


C



D

$\frac{3}{5}$



E

$\frac{2}{4} = \frac{1}{2}$

Write the letters of all the diagrams that have exactly $\frac{1}{2}$ shaded.

C, E

Which of the diagrams has exactly $\frac{1}{3}$ shaded?

B

[1 mark]

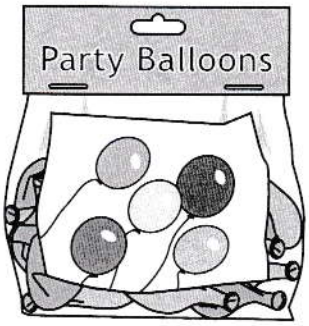
2 Sarah has a packet of balloons.

[2010]

The contents of the packet are

5 red balloons
5 blue balloons
10 yellow balloons

} TOTAL = 20



Sarah says,

'One-quarter of the balloons are red'.

Is Sarah correct?
Circle **Yes** or **No**.

Yes / No

Explain how you know.

THE TOTAL NUMBER OF BALLONS IS 20, SO THE FRACTION OF RED ONES IS $\frac{5}{20} = \frac{1}{4}$

[1 mark]

3 Write the two missing values to make these equivalent fractions correct.

[2016]

$$\frac{\boxed{2}}{3} = \frac{8}{12} = \frac{4}{\boxed{6}}$$

÷2 ÷4

[2 marks]

4 Two of the fractions below are **equivalent.**

[2009]

Circle them.

$\frac{2}{3}$ $\frac{6}{10}$ $\frac{9}{12}$ $\frac{10}{15}$ $\frac{16}{20}$

$\frac{3}{5}$ $\frac{3}{4}$ $\frac{2}{3}$ $\frac{4}{5}$

[1 mark]

5 Complete these fractions to make each equivalent to $\frac{3}{5}$

[2001]

$\frac{\boxed{6}}{10}$ $\frac{\boxed{9}}{15}$ $\frac{12}{\boxed{20}}$

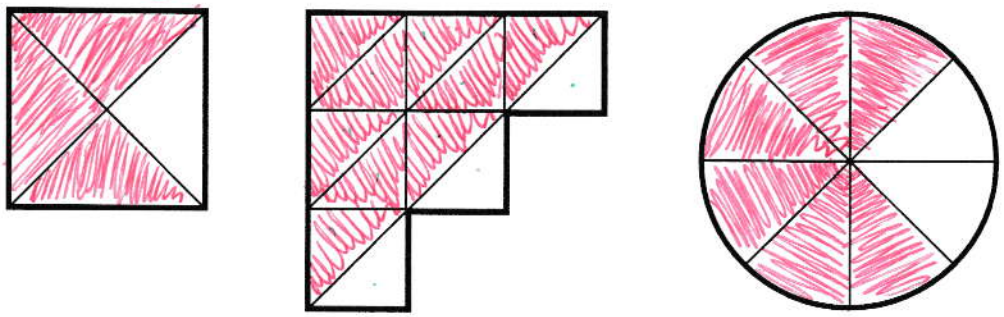
[2 marks]

6 Each diagram below is divided into equal sections.

[2016]

Shade three-quarters of each diagram.

[ANY 3] [ANY 9] [ANY 6]



12 TRIANGLES, SO SHADE $\frac{9}{12}$

8 SECTORS, SO SHADE $\frac{6}{8}$

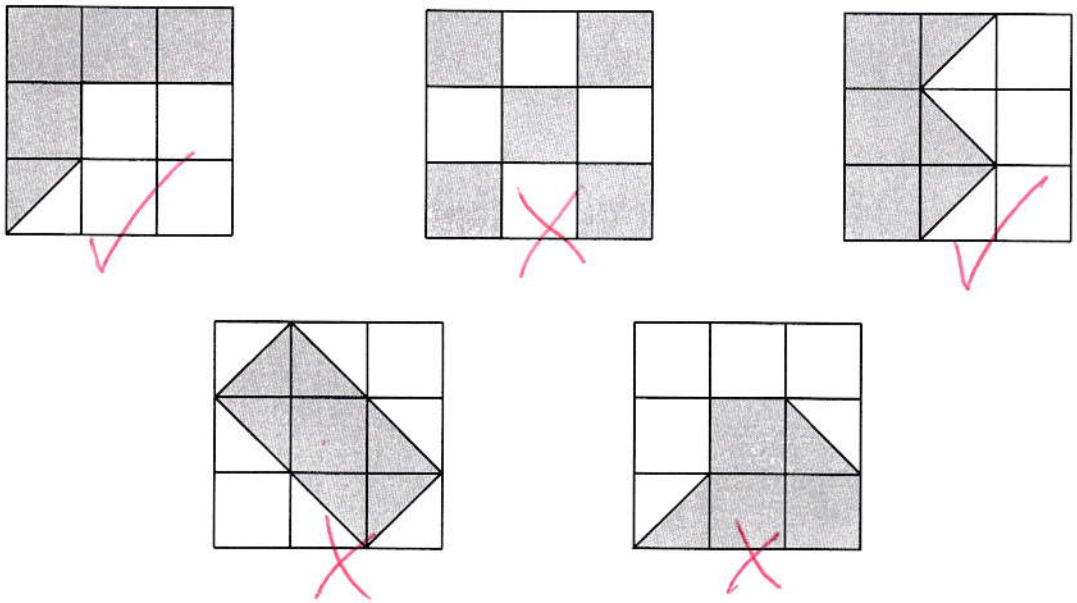
[2 marks]

7 Here are five diagrams.

[2007]

Put a tick (✓) on the diagram if exactly $\frac{1}{2}$ of it is shaded.
Put a cross (✗) if it is not.

[LOOKING FOR 4½ SQUARES SHADED!]

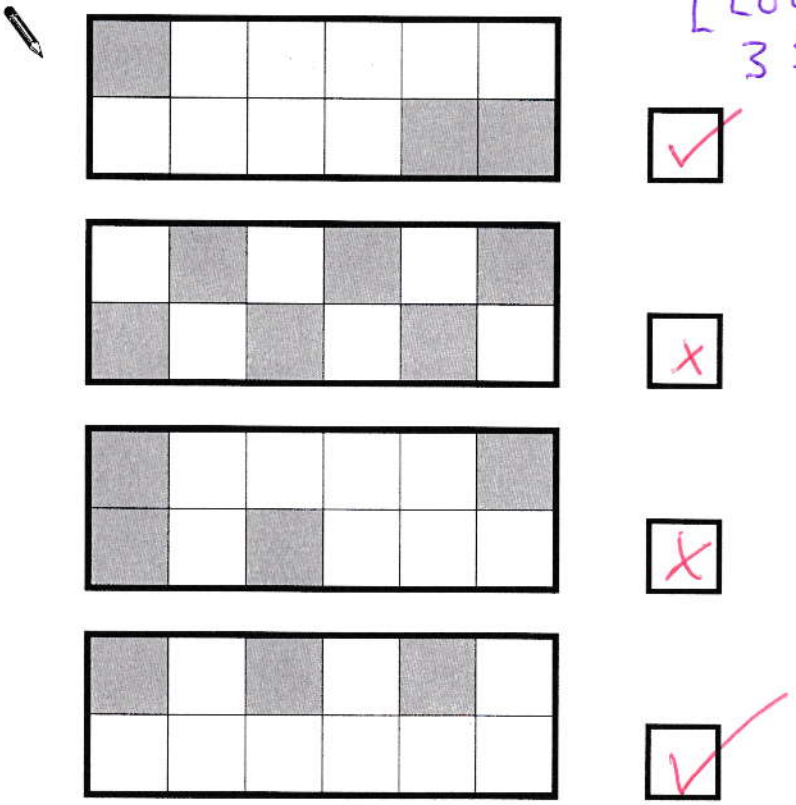


[1 mark]

8 Tick (✓) each shape that is exactly $\frac{1}{4}$ shaded.

[2013]

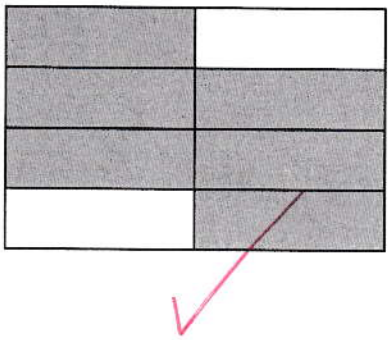
[LOOKING FOR 3 SQUARES SHADED!]

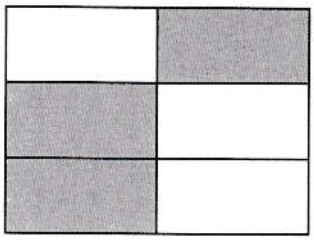


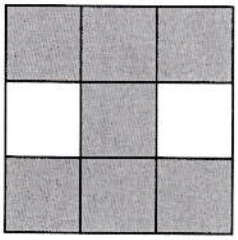
[2 marks]

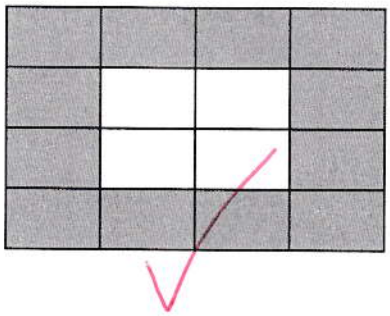
9 Tick two shapes that have $\frac{3}{4}$ shaded.

[2017]





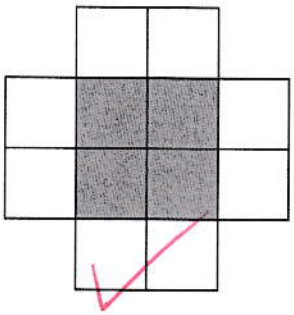




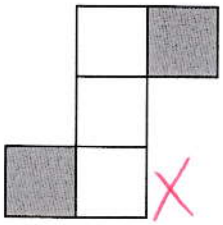
[1 mark]

10 These diagrams are all made of squares.

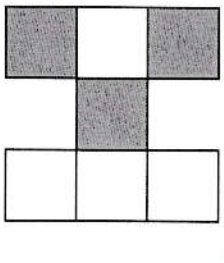
[2010] Put a tick (✓) if exactly $\frac{1}{3}$ of it is shaded. Put a cross (✘) if it is not.



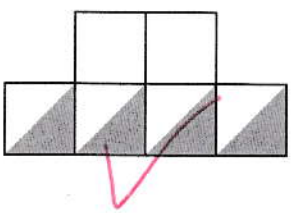
$\frac{4}{12} = \frac{1}{3}$



$\frac{2}{5}$



$\frac{3}{7}$

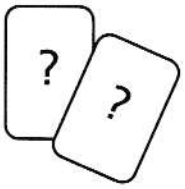


$\frac{2}{6} = \frac{1}{3}$

[2 marks]

11 Karen makes a fraction using two number cards.

[2003] She says,



'My fraction is equivalent to $\frac{1}{2}$

One of the number cards is 6'

What could Karen's fraction be?

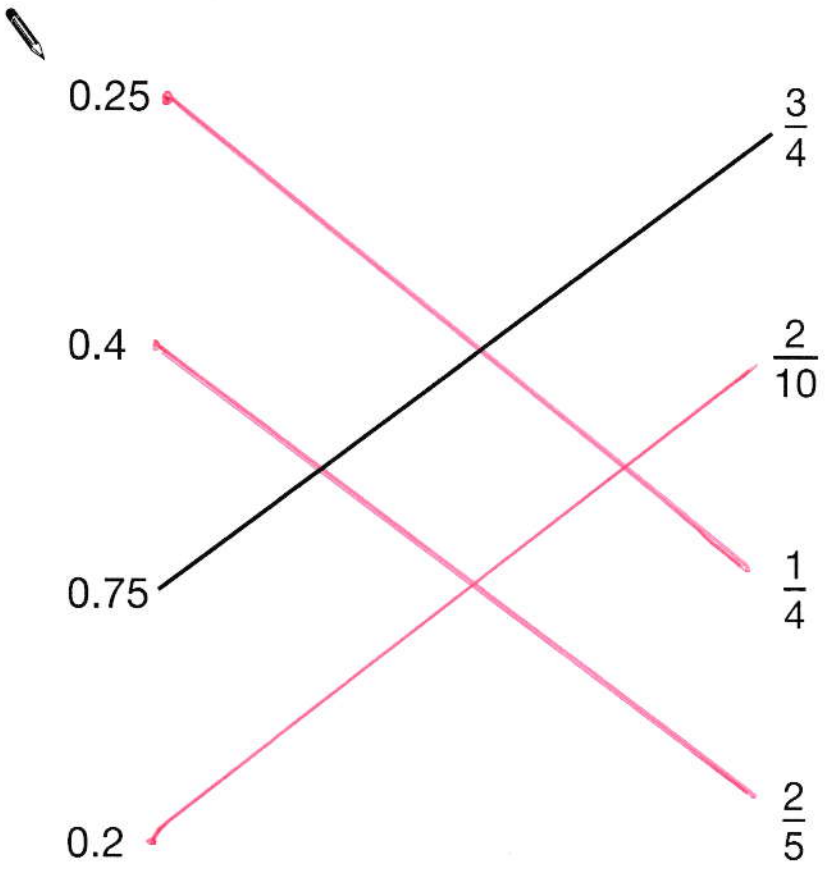
Give both possible answers.

$\frac{6}{12}$ or $\frac{3}{6}$

[1 mark]

12 Match each decimal number to its equivalent fraction.

[2006] One has been done for you.



[2 marks]

13

[2011]

Holly says,

'One-third of this shape is shaded'.

Is Holly correct?
Circle **Yes** or **No**.

Yes / No

Explain how you know.

THE TWO TRIANGLE MAKE ONE WHOLE SQUARE

SINCE THERE ARE THREE SQUARES IN TOTAL $\frac{1}{3}$ IS SHADED.

[1 mark]

14

[New]

Here are some digit cards.

2 3 4 5 6 8 9

Use **four** of the cards to complete these equivalent fractions.

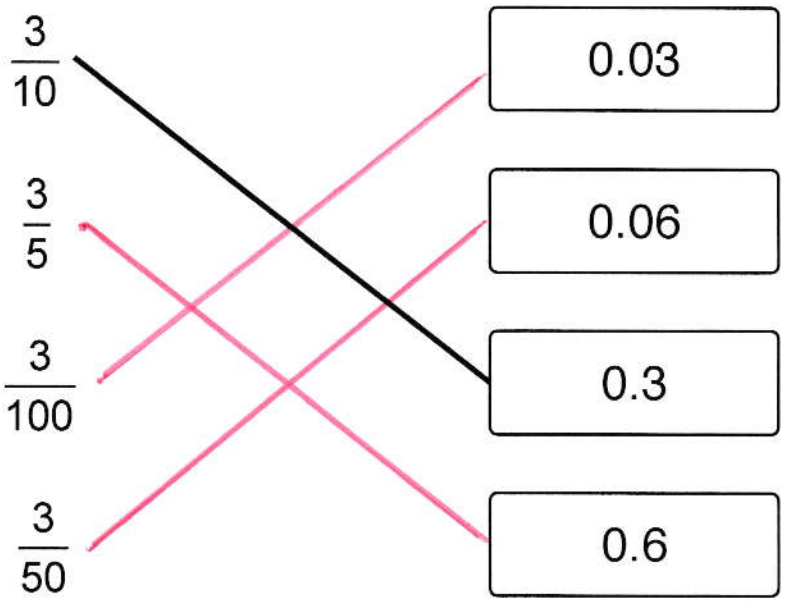
Each fraction is less than one.

$\frac{2}{3} = \frac{6}{9}$ $\frac{6}{8} = \frac{3}{4}$

[1 mark]

15 Join each fraction to the correct decimal card.

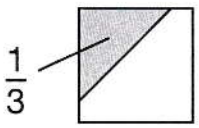
[2014] One has been done for you.



[2 marks]

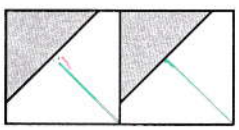
16 $\frac{1}{3}$ of this square is shaded.

[2008]



The same square is used in the diagrams below.

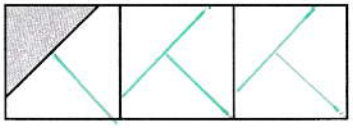
What fraction of this diagram is shaded?



2/6

1/3

What fraction of this diagram is shaded?



1/9

1/9

[2 marks]