

Thursday 23rd April 2020

To start off today's lesson we are going to recap calculations using all operations

Practise:

- 1) $23605 + 16009$
- 2) $702431 - 13160$
- 3) 14×36
- 4) $345 \div 4 =$

Use & Apply

- 1) $71533 - \underline{\hspace{2cm}} = 25187$
- 2) $380 \times 10 = 2500 + \underline{\hspace{2cm}}$
- 3) $480 \div 10 = \underline{\hspace{2cm}} \times 6$
- 4) Kuba got £268 for his birthday. Asad received £165. What is the difference between the 2 amounts?
- 5) A factory needed to make 18,900 Xbox controllers on Monday, Tuesday and Wednesday. On Monday, they made 6136. On Tuesday, they made 7168. How many more Xbox controllers do they need to make on Wednesday to reach their target?

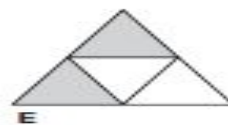
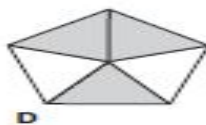
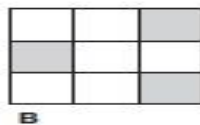
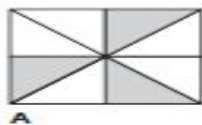
This week we will continue to work on 'fabulous fractions.'

Read the question and explain the answer in your books.

WALT - solve problems involving equivalent fractions

1
[2014]

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



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

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

For this question think about the whole number. You can do this by adding the amounts given in the problem. Then work out the fraction of that amount.

2

[2010]

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.

5

[2001]

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



$$\frac{\square}{10}$$

$$\frac{\square}{15}$$

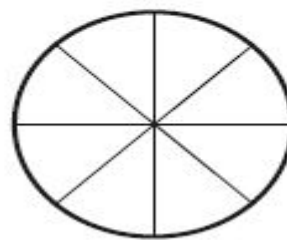
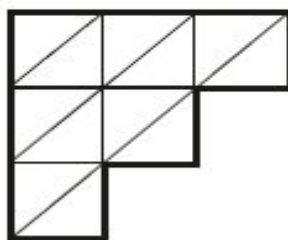
$$\frac{12}{\square}$$

6

[2016]

Each diagram below is divided into equal sections.

Shade three-quarters of each diagram.

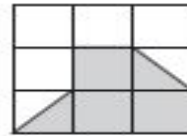
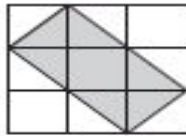
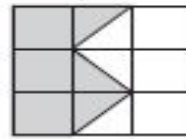


7

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.

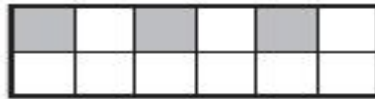
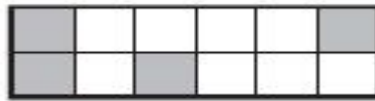
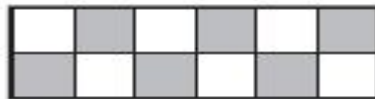
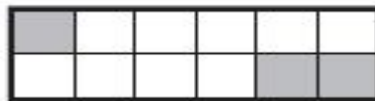


[1 mark]

8

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

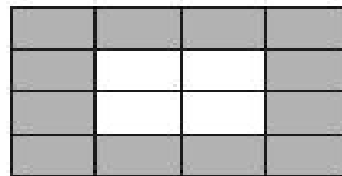
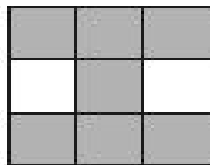
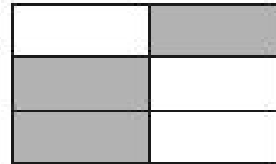
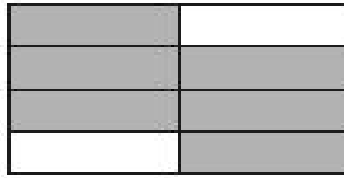
[2013]



[2 marks]

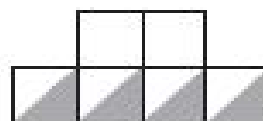
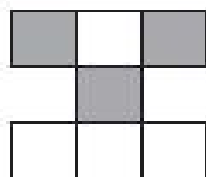
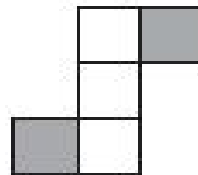
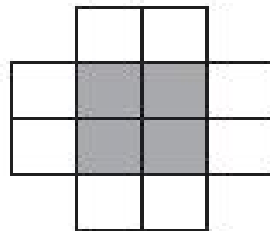
9Tick two shapes that have $\frac{3}{4}$ shaded.

[2017]

**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.

11

[2003]

Karen makes a fraction using two number cards.

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.

	or	

[1 mark]

12

[2006]

Match each decimal number to its equivalent fraction.

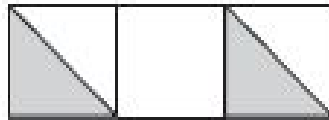
One has been done for you.



[2 marks]

13

[2011]



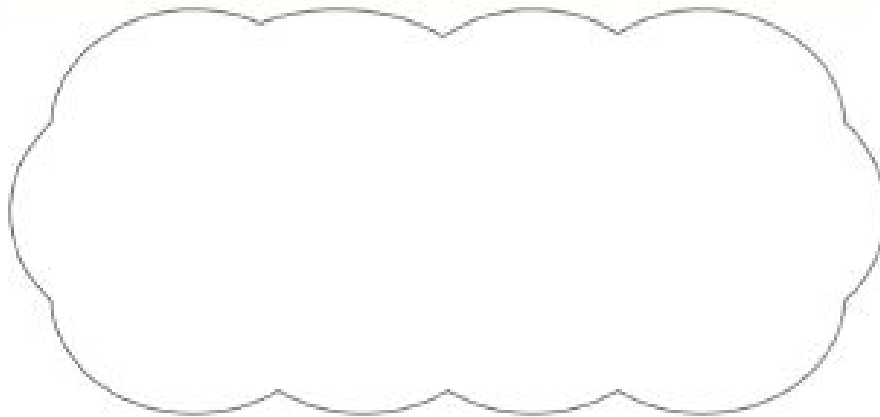
Holly says,

'One-third of this shape is shaded'.

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

Yes / No

Explain how you know.

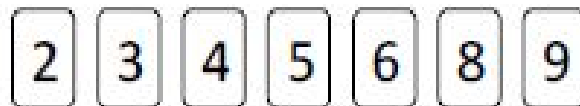


[1 mark]

14

Here are some digit cards.

[New]



Use four of the cards to complete these equivalent fractions.

Each fraction is less than one.

$$\frac{\boxed{}}{\boxed{3}} = \frac{\boxed{6}}{\boxed{}} \qquad \frac{\boxed{6}}{\boxed{}} = \frac{\boxed{}}{\boxed{4}}$$

[1 mark]

15

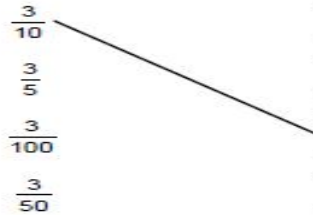
Join each fraction to the correct decimal card.

[2014]

One has been done for you.

- $\frac{3}{10}$
- $\frac{3}{5}$
- $\frac{3}{100}$
- $\frac{3}{50}$

- 0.03
- 0.06
- 0.3
- 0.6



[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?



What fraction of this diagram is shaded?



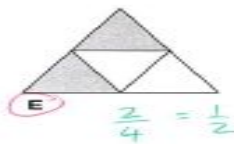
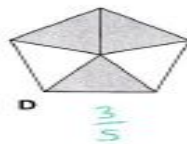
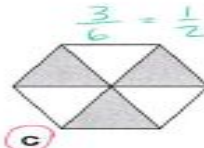
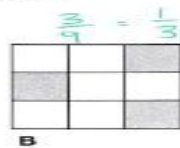
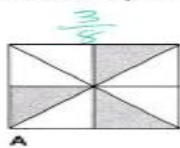
[2 marks]

Answers:

1

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

[2014]



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

2

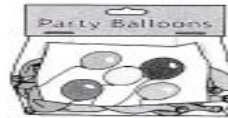
[2010]

Sarah has a packet of balloons.

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

[1 mark]

3

[2016]

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

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

Handwritten annotations: $\div 4$ (under 3), $\div 2$ (over 8), $\div 2$ (over 4)

[2 marks]

4

[2009]

Two of the fractions below are equivalent.

Circle them.

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

Handwritten annotations: $\div 3$ (under 6), $\div 3$ (under 9), $\div 3$ (under 10), $\div 5$ (under 16)

5

[2001]

Complete these fractions to make each equivalent to $\frac{3}{4}$

$\frac{6}{10}$
 $\frac{9}{15}$

$\frac{12}{\boxed{20}}$

6

[2016]

Each diagram below is divided into equal sections.

Shade three-quarters of each diagram.



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



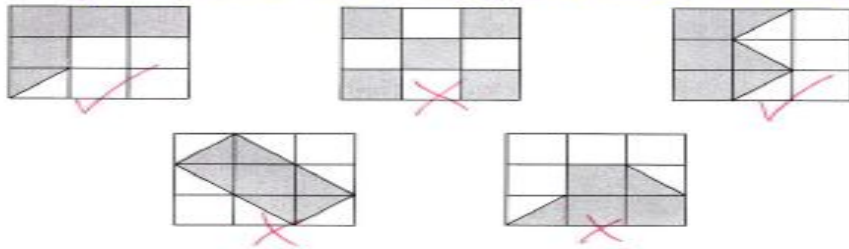
8 SECTORS, SO SHADE $\frac{6}{8}$

7
[2007]

Here are five diagrams.

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

[LOOKING FOR $4\frac{1}{2}$ SQUARES SHADED!]

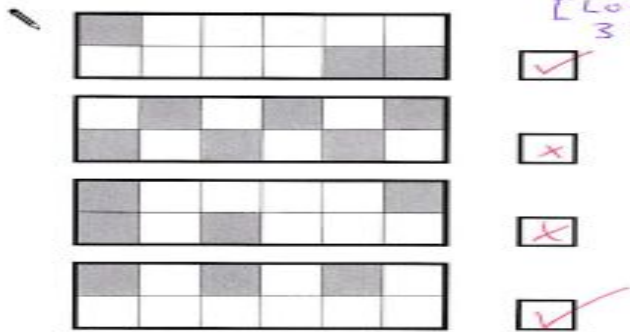


[1 mark]

8
[2013]

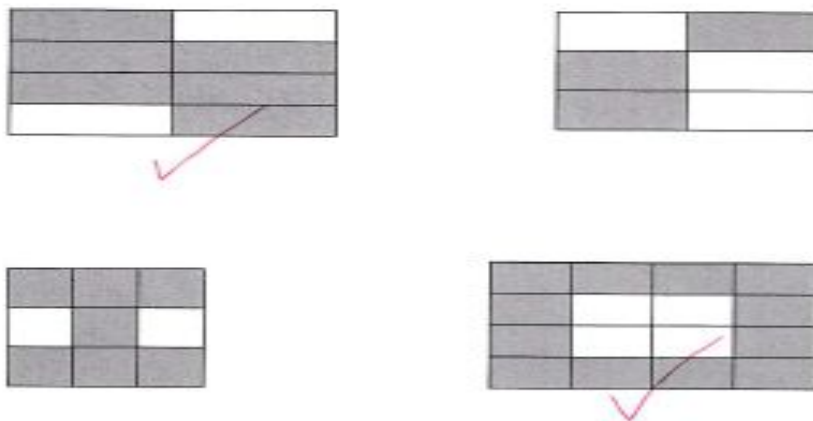
Tick (✓) each shape that is exactly $\frac{1}{4}$ shaded.

[LOOKING FOR 3 SQUARES SHADED!]



9
[2017]

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



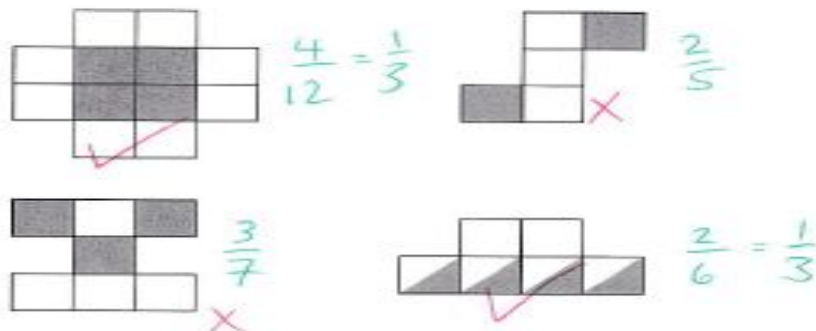
1

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.



12

11
[2003]

Karen makes a fraction using two number cards.
She says,

*'My fraction is equivalent to $\frac{1}{2}$
One of the number cards is 6'*

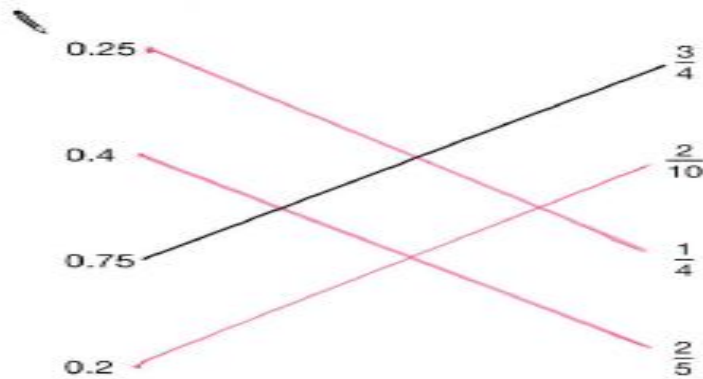


What could Karen's fraction be?
Give both possible answers.

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

12
[2006]

Match each decimal number to its equivalent fraction.
One has been done for you.



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.



Use four of the cards to complete these equivalent fractions.

Each fraction is less than one.

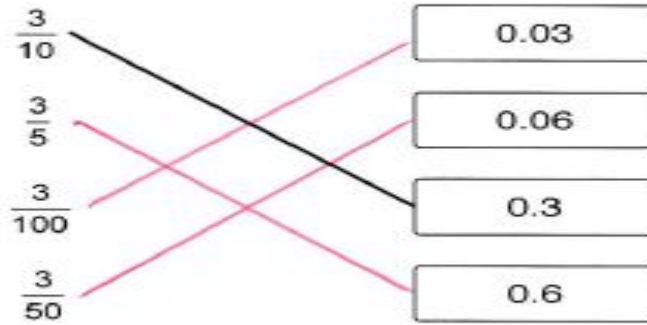
$$\frac{2}{3} = \frac{6}{9} \quad \frac{6}{8} = \frac{3}{4}$$

15

Join each fraction to the correct decimal card.

[2014]

One has been done for you.



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?

 $\frac{2}{6}$ 

What fraction of this diagram is shaded?

 $\frac{1}{9}$ 