Fractions Wall

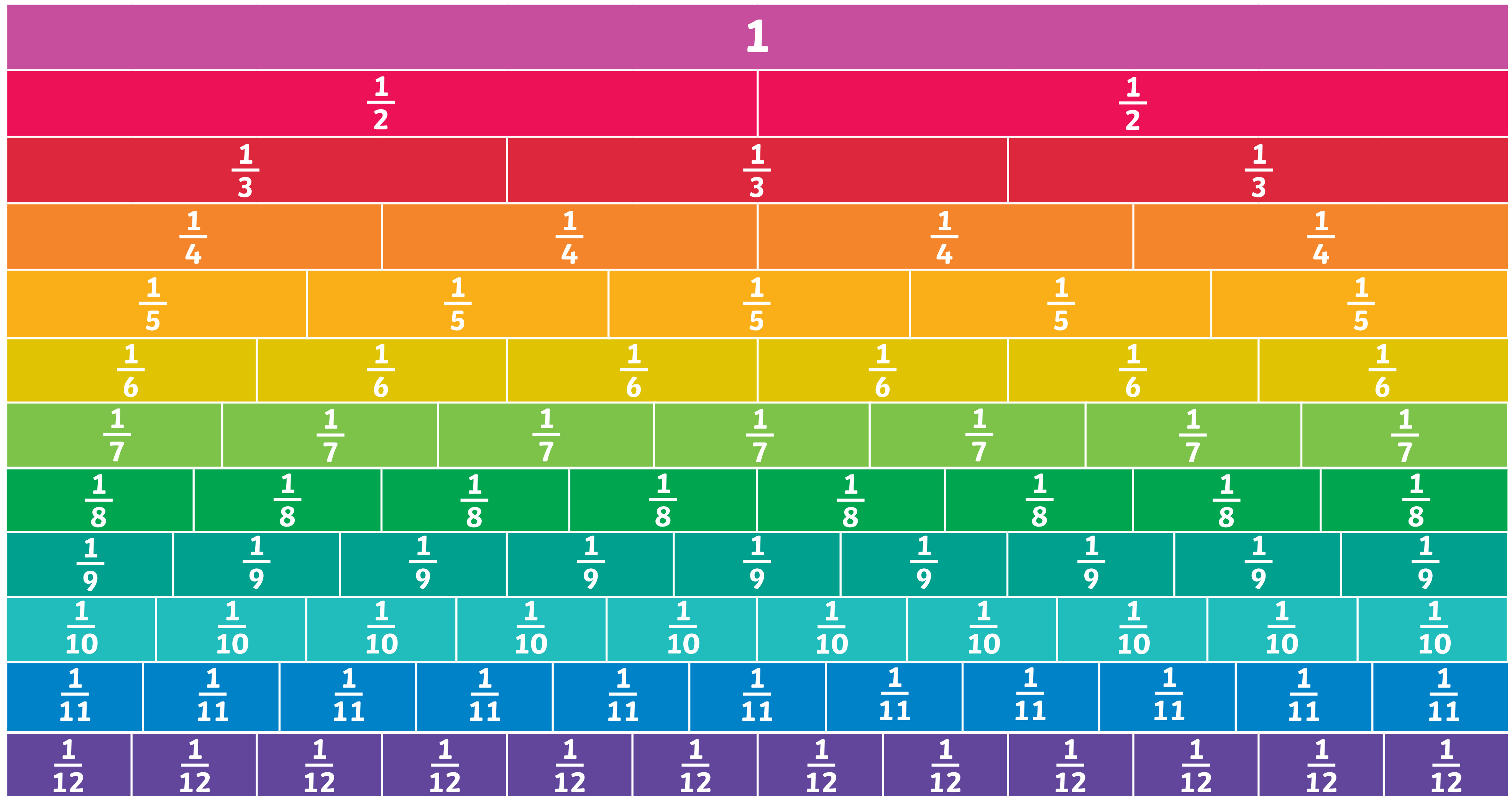| 1											
$\frac{1}{2}$						$\frac{1}{2}$					
$\frac{1}{3}$				$\frac{1}{3}$				$\frac{1}{3}$			
$\frac{1}{4}$			$\frac{1}{4}$			$\frac{1}{4}$			$\frac{1}{4}$		
$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$			$\frac{1}{5}$		
$\frac{1}{6}$	$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		
$\frac{1}{7}$	$\frac{1}{7}$	$\frac{1}{7}$		$\frac{1}{7}$	$\frac{1}{7}$		$\frac{1}{7}$		$\frac{1}{7}$		
$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$		$\frac{1}{8}$	$\frac{1}{8}$		$\frac{1}{8}$		
$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$		$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$		
$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$		$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	
$\frac{1}{11}$	$\frac{1}{11}$	$\frac{1}{11}$	$\frac{1}{11}$	$\frac{1}{11}$	$\frac{1}{11}$	$\frac{1}{11}$	$\frac{1}{11}$		$\frac{1}{11}$	$\frac{1}{11}$	$\frac{1}{11}$
$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$

Use your fraction wall/imagine slices of pizza. They can cover the same space/ amount even if some are different sizes. You can join them together for example.
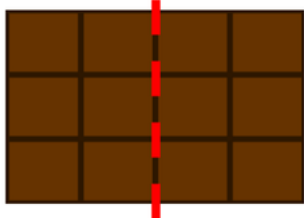
Equivalent fractions

Two fractions are equivalent if they represent the same proportion of a whole, or the same sized portion of the original.

Here is a chocolate bar with 12 squares.
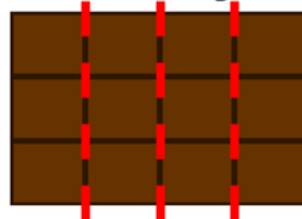
I could break this chocolate bar in half:

Each share is $\frac{1}{2}$ of the bar.

Each share is $\frac{6}{12}$ pieces. $\frac{1}{2} = \frac{6}{12}$

If I broke each half in half again:

Each share is $\frac{1}{4}$ of the bar.

Each share is $\frac{3}{12}$ pieces. $\frac{1}{4} = \frac{3}{12}$

1/2   x2   6/12

Both half - the numerator is half of the denominator

x2   You can also multiply/divide by 2!

Remember to always multiply or divide both the numerator and the denominator by the same amount!

Equivalent fractions

You can find equivalent fractions quickly by multiplying the numerator and denominator by the same number.
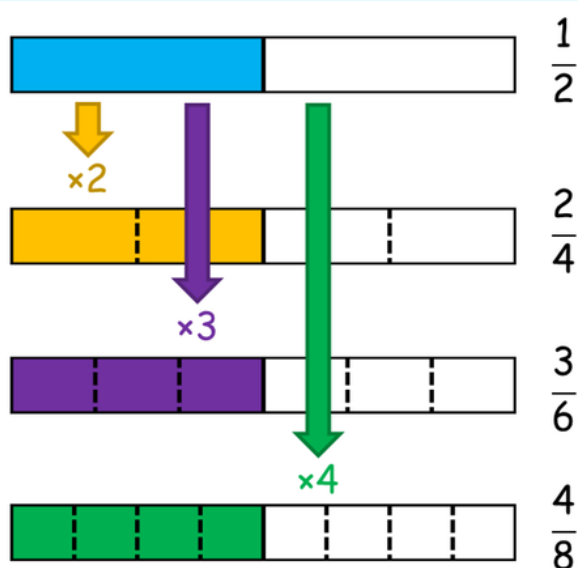
To cancel a fraction to its simplest form, divide the numerator and denominator by the same amount.
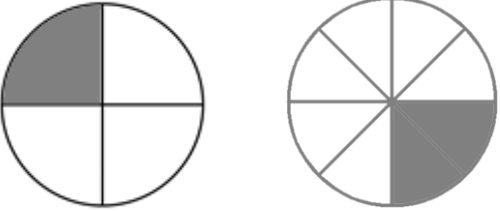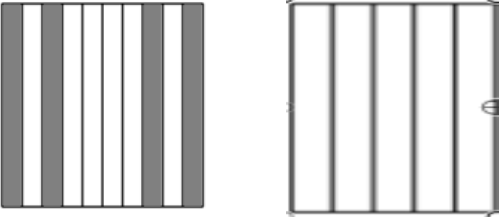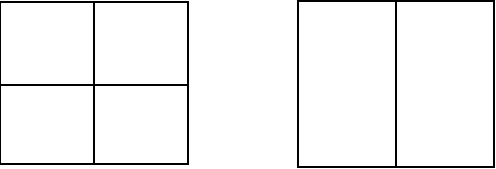
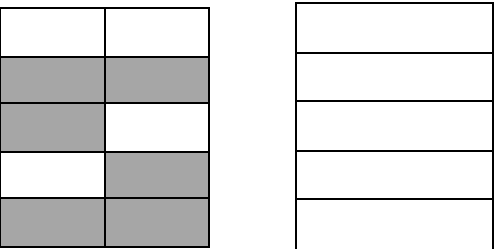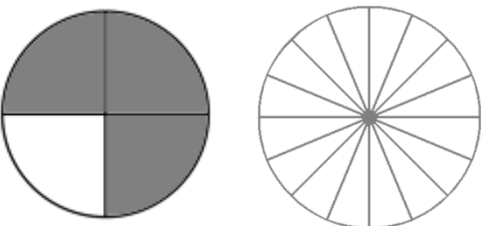$$\frac{10}{20} \xrightarrow{\div 10} \frac{1}{2} \qquad \frac{10}{15} \xrightarrow{\div 5} \frac{2}{3}$$
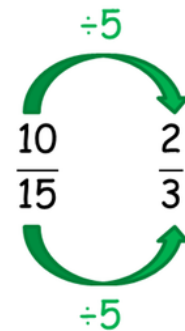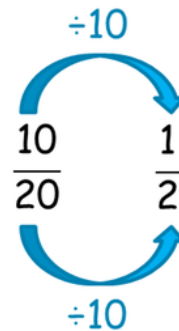
Top Tip
Learn your times tables thoroughly to make simplifying fractions easier to do.

Bronze

Pictorial representation	Equivalent fractions
	$$\frac{1}{\square} = \frac{2}{\square}$$
	$$\frac{4}{10} = \frac{2}{\square}$$
	$$\frac{\square}{4} = \frac{\square}{2}$$
	$$\frac{\square}{\square} = \frac{1}{3}$$
	$$\frac{\square}{\square} = \frac{\square}{5}$$
	$$\frac{\square}{4} = \frac{\square}{\square}$$

Silver

$$\frac{1}{2} = \frac{}{8}$$

$$\frac{2}{3} = \frac{}{12}$$

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

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

- -

$$\frac{3}{4} = \frac{}{8}$$

$$\frac{5}{6} = \frac{}{12}$$

$$\frac{5}{8} = \frac{10}{}$$

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

- -

$$\frac{1}{4} = \frac{}{16}$$

$$\frac{2}{5} = \frac{}{10}$$

$$\frac{4}{5} = \frac{12}{}$$

$$\frac{3}{10} = \frac{9}{}$$

- -

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

$$\frac{7}{8} = \frac{}{16}$$

$$\frac{1}{8} = \frac{3}{}$$

$$\frac{3}{4} = \frac{9}{}$$

- -

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

$$\frac{2}{8} = \frac{}{4}$$
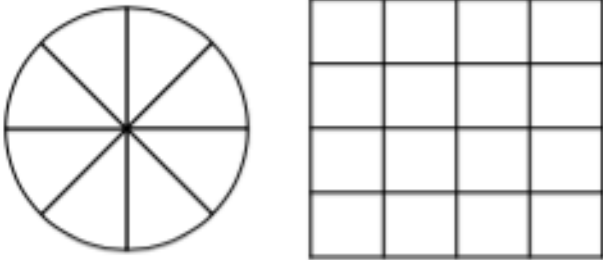
$$\frac{8}{10} = \frac{4}{}$$

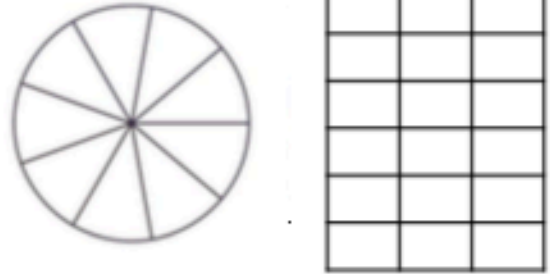$$\frac{9}{18} = \frac{1}{}$$

Silver Answers

$$\frac{1}{2} = \frac{4}{8} \qquad \frac{1}{6} = \frac{2}{12}$$

$$\frac{2}{3} = \frac{8}{12} \qquad \frac{1}{4} = \frac{3}{12}$$

$$\frac{3}{4} = \frac{6}{8} \qquad \frac{5}{8} = \frac{10}{16}$$

$$\frac{5}{6} = \frac{10}{12} \qquad \frac{1}{3} = \frac{3}{9}$$

$$\frac{1}{4} = \frac{4}{16} \qquad \frac{4}{5} = \frac{12}{15}$$

$$\frac{2}{5} = \frac{4}{10} \qquad \frac{3}{10} = \frac{9}{30}$$

$$\frac{1}{3} = \frac{2}{6} \qquad \frac{1}{8} = \frac{3}{24}$$

$$\frac{7}{8} = \frac{14}{16} \qquad \frac{3}{4} = \frac{9}{12}$$

$$\frac{4}{6} = \frac{2}{3} \qquad \frac{8}{10} = \frac{4}{5}$$

$$\frac{2}{8} = \frac{1}{4} \qquad \frac{9}{18} = \frac{1}{2}$$

Gold

Colour $\frac{2}{8}$ of each shape.
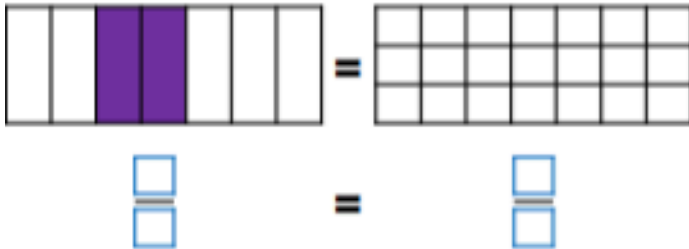

VF

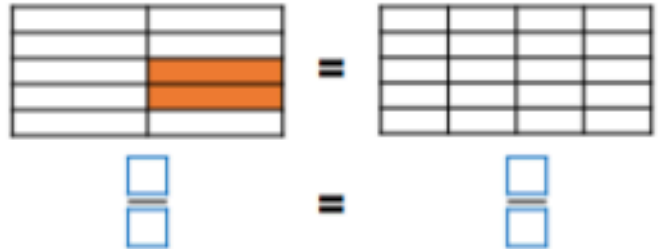Colour $\frac{2}{9}$ of each shape.

VF

Colour the second image to show an equivalent fraction. Write the fractions underneath.

VF

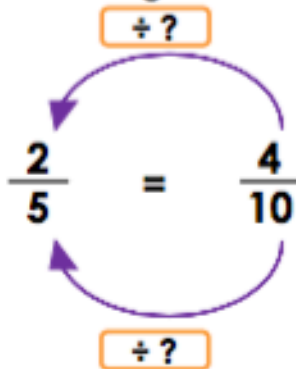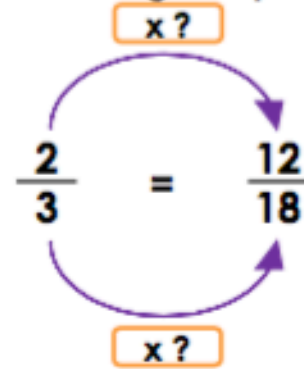Colour the second image to show an equivalent fraction. Write the fractions underneath.
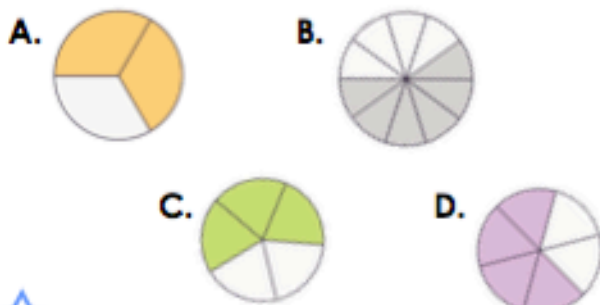

VF

Fill in the missing divisor.

÷ ?

$$\frac{2}{5} = \frac{4}{10}$$

÷ ?

VF

Fill in the missing multiplier.

x ?

$$\frac{2}{3} = \frac{12}{18}$$

x ?

VF

Match the equivalent fractions.

A.

B.

C.

D.
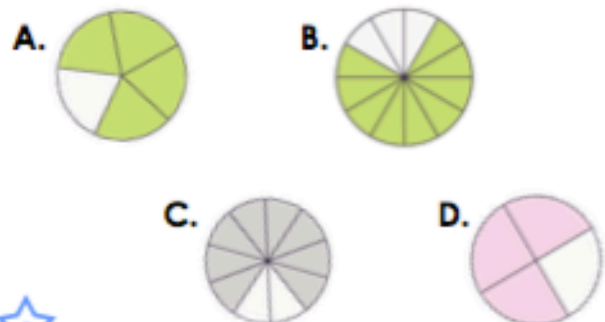

VF

Match the equivalent fractions.

A.

B.

C.

D.

VF

Gold Answers

. 2 parts shaded; 4 parts shaded

. Any 6 parts. $\dfrac{2}{7} = \dfrac{6}{21}$

. 2

. A and D match; B and C match

. 2 parts shaded; 4 parts shaded

. Any 4 parts. $\dfrac{2}{10} = \dfrac{4}{20}$

. 6

. A and C match; B and D match

Gold Challenge

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.