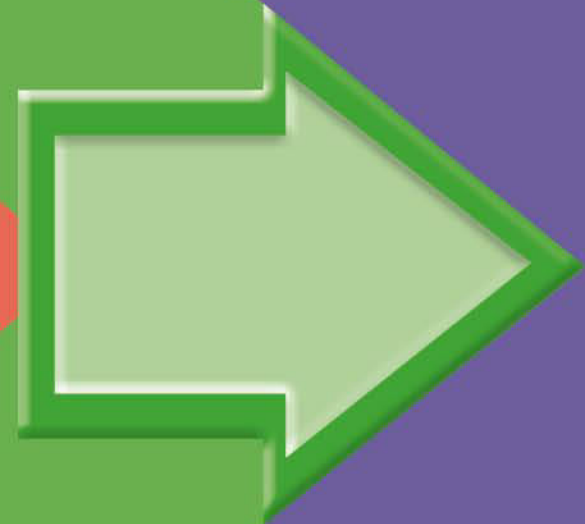


# EQUIVALENT FRACTIONS



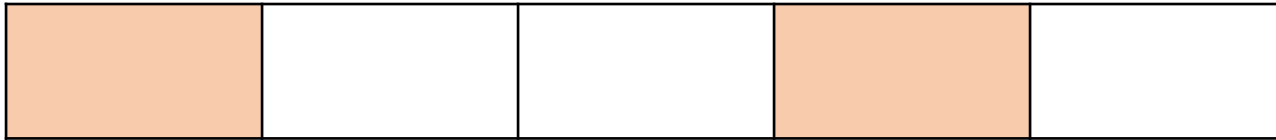
**GET READY**



1) Circle the non-unit fractions

$$\frac{2}{5} \quad \frac{1}{7} \quad \frac{4}{5} \quad \frac{5}{6} \quad \frac{1}{9}$$

2) What fraction of the bar is shaded orange?



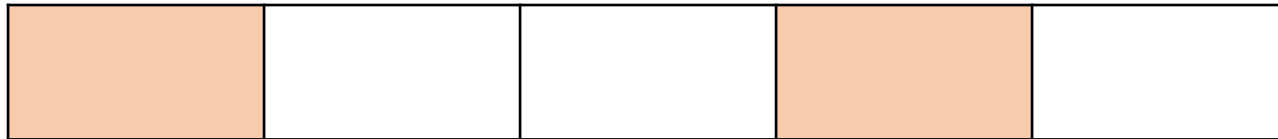
3) What fraction of the bar is shaded blue?



1) Circle the non-unit fractions

$$\frac{2}{5} \quad \frac{1}{7} \quad \frac{4}{5} \quad \frac{5}{6} \quad \frac{1}{9}$$

2) What fraction of the bar is shaded orange?



$$\frac{2}{5}$$

3) What fraction of the bar is shaded blue?



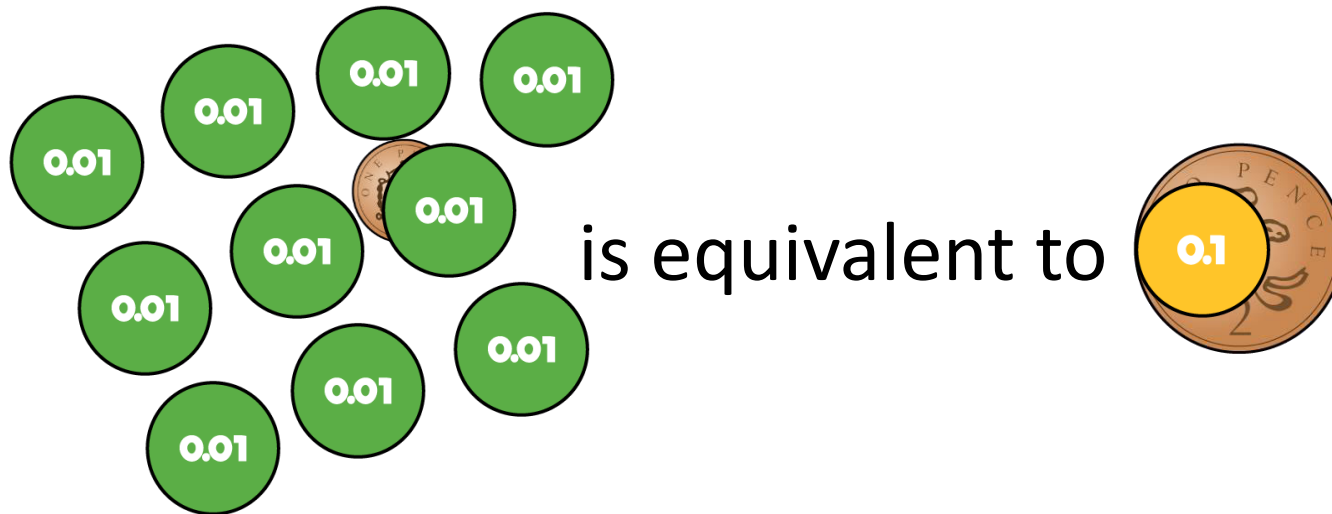
$$\frac{4}{10}$$

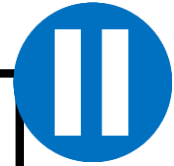
LET'S LEARN



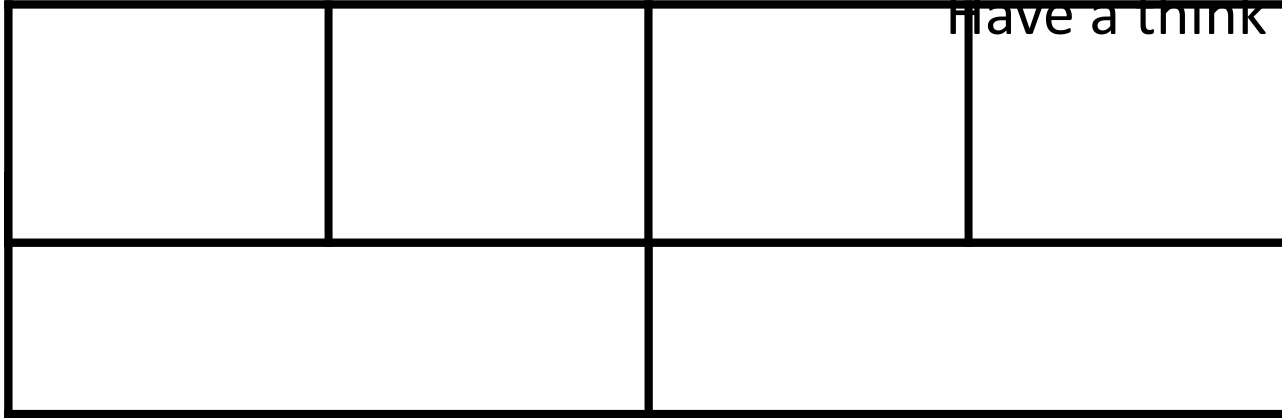
# Equivalent fractions

Equivalent means the same *value* or *amount*.

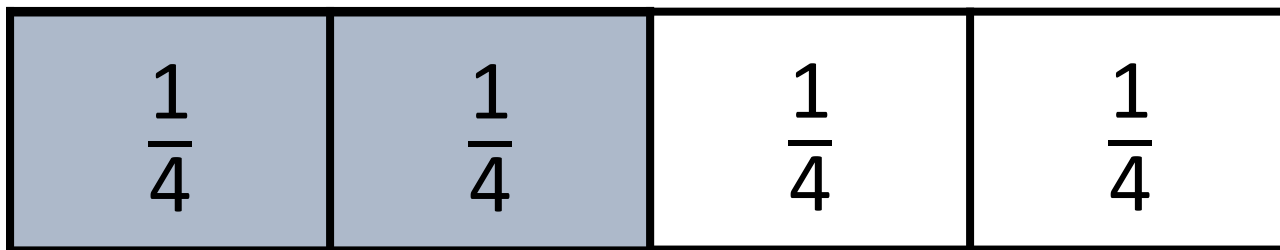
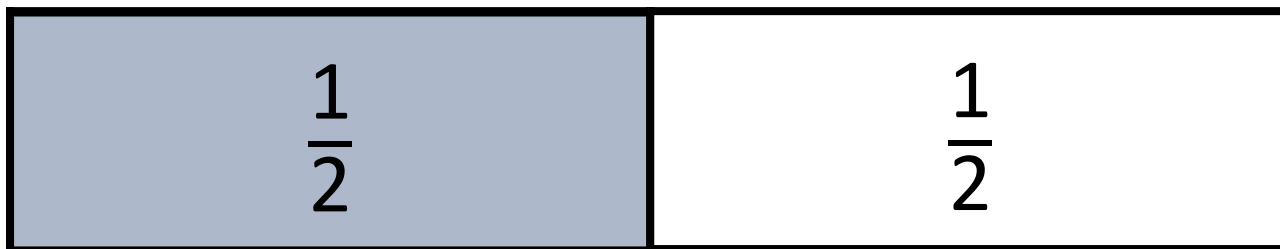




Have a think



Here is a strip of paper.  
What do you notice?  
I cut it into 4 equal pieces.

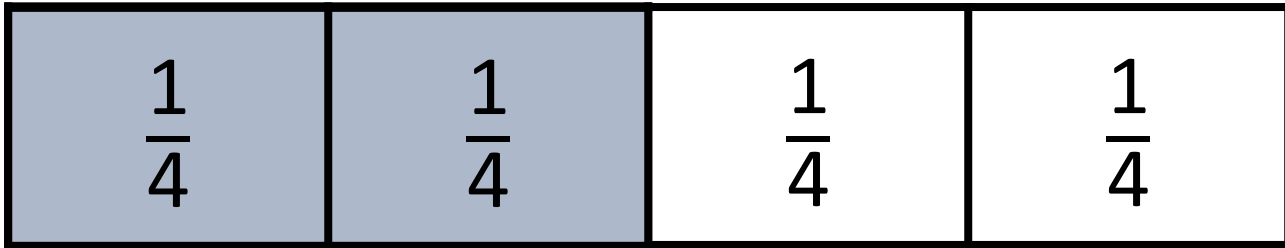
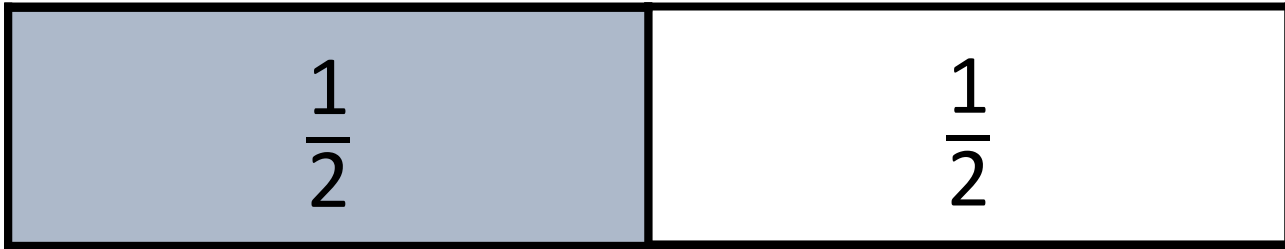


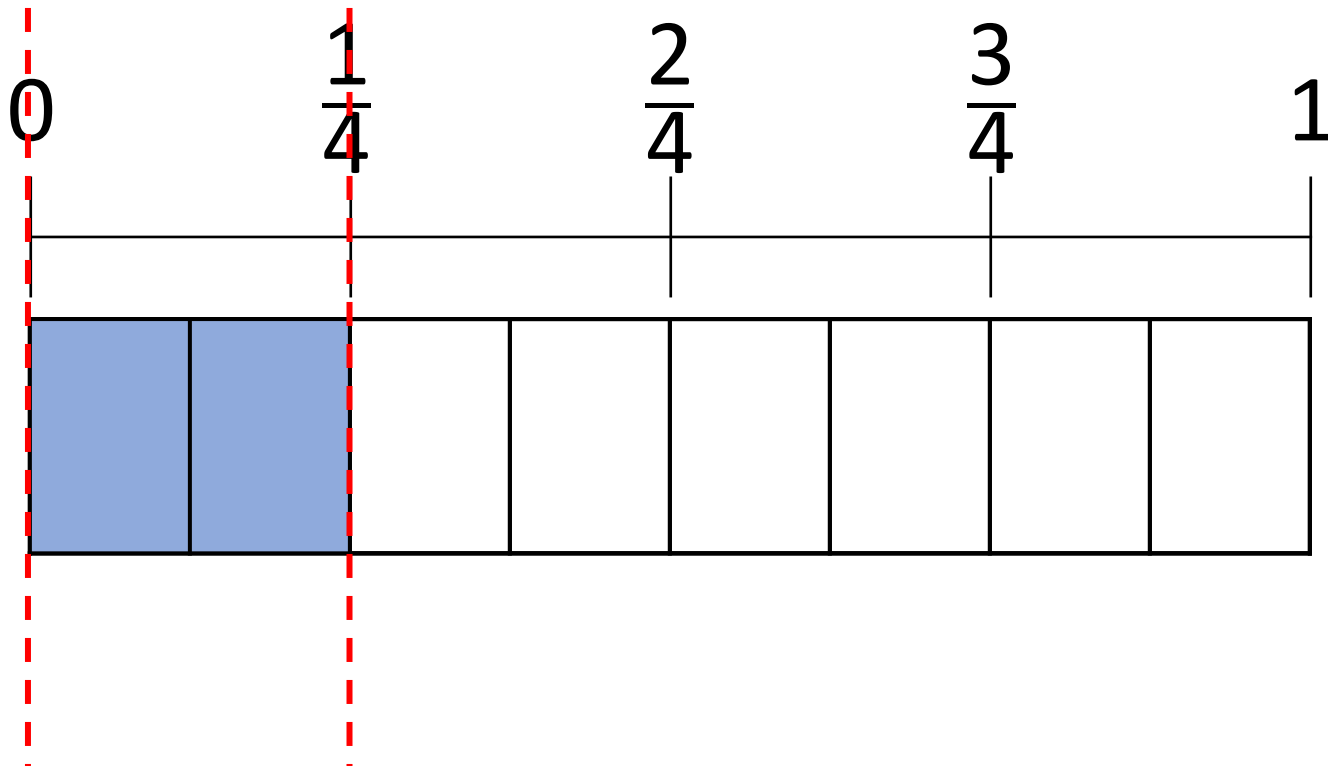
$\frac{1}{2}$  is equivalent to  $\frac{2}{4}$



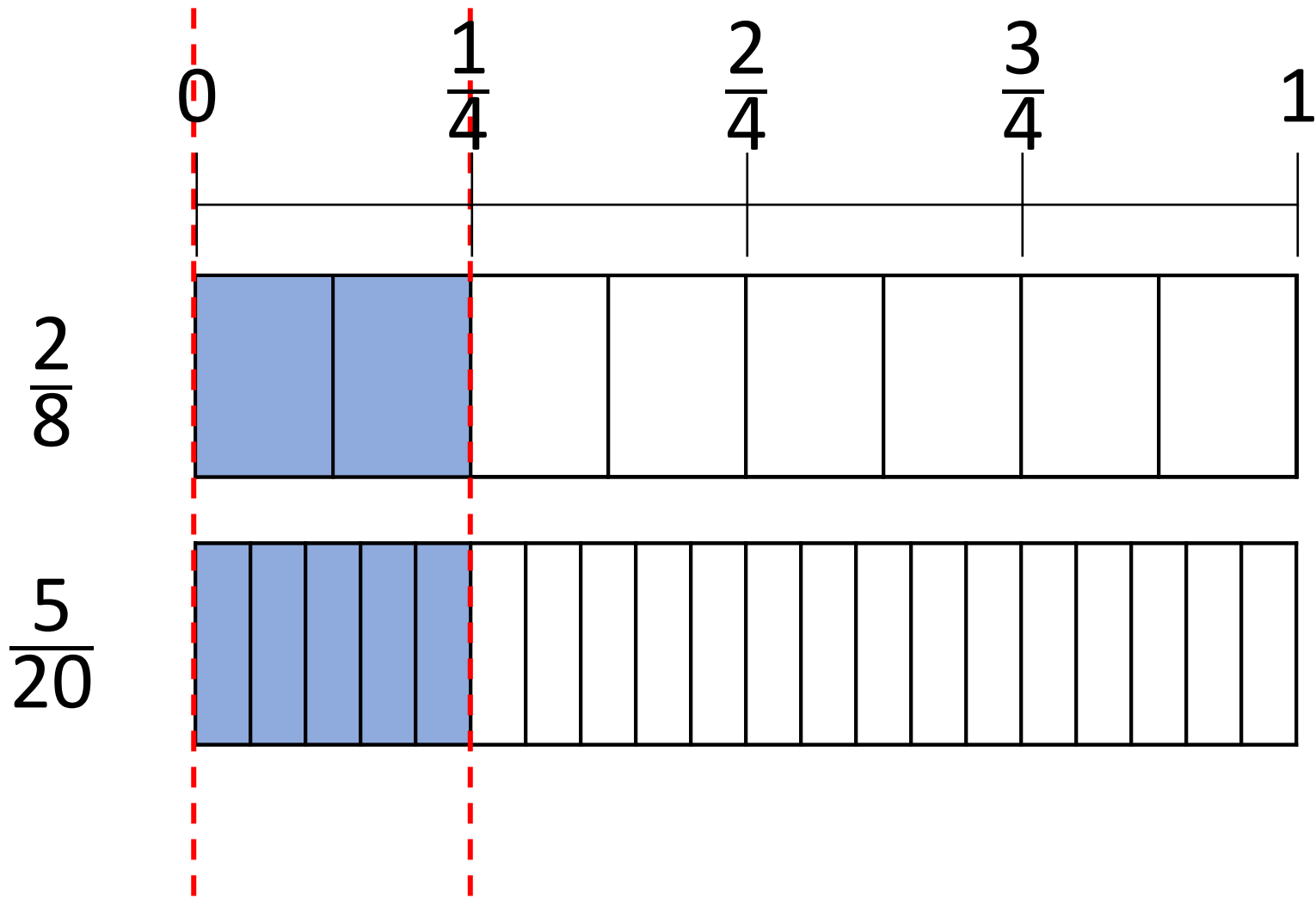
$$\times 2 \left( \frac{1}{2} \right) \div 2$$

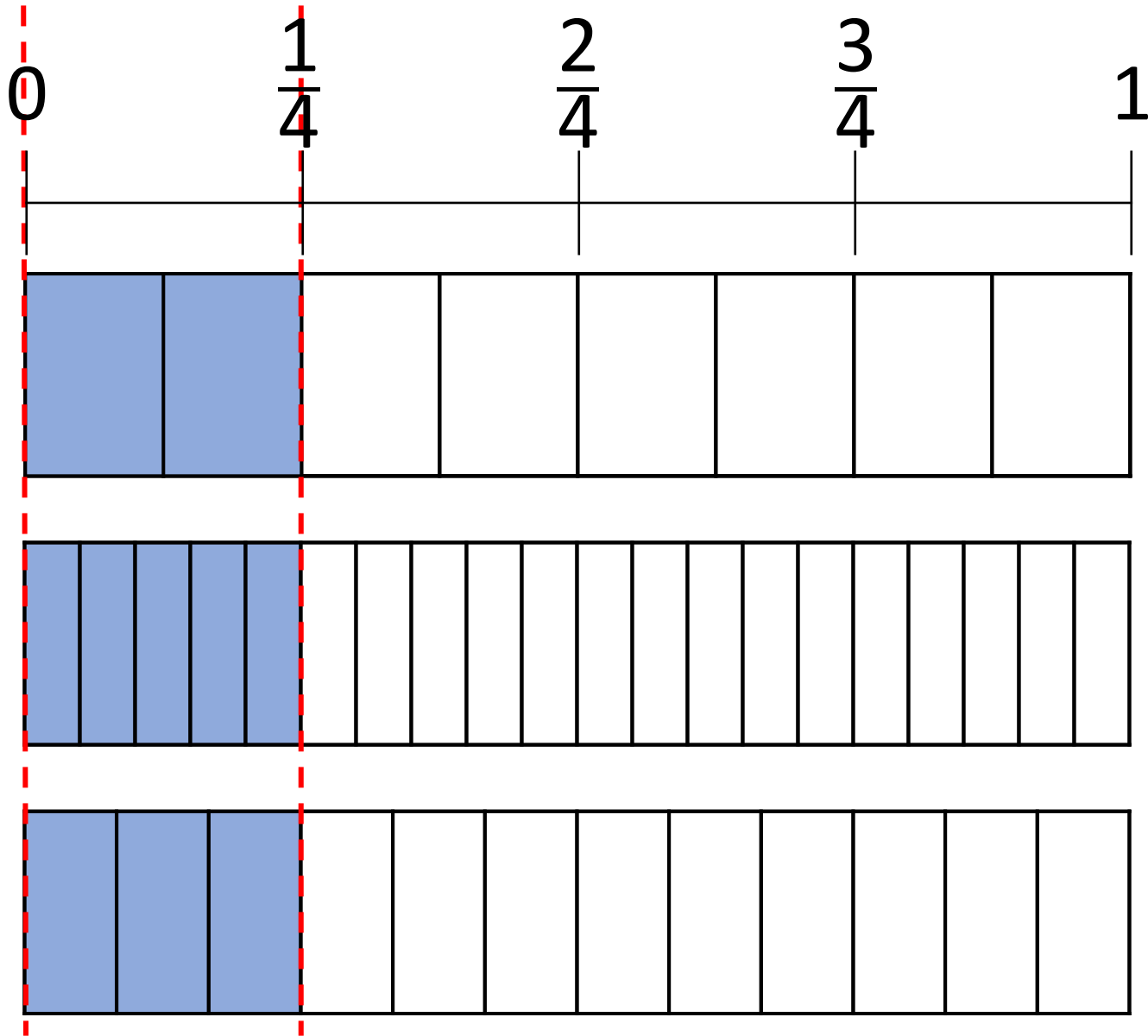
$$\div 2 \left( \frac{2}{4} \right) \times 2$$





$\frac{2}{8}$  is equivalent to  $\frac{1}{4}$





Have a think



$$\frac{1}{4} = \frac{\boxed{\phantom{000}}}{8} = \frac{3}{\boxed{\phantom{000}}} = \frac{\boxed{\phantom{000}}}{20} = \frac{\boxed{\frac{12}{40}}}{\boxed{\frac{40}{40}}}$$

Have a think

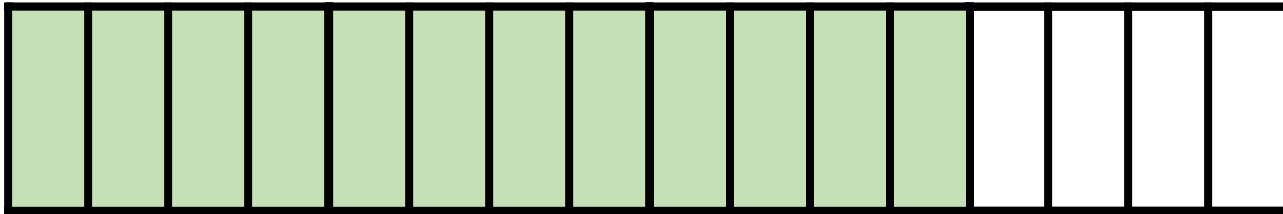
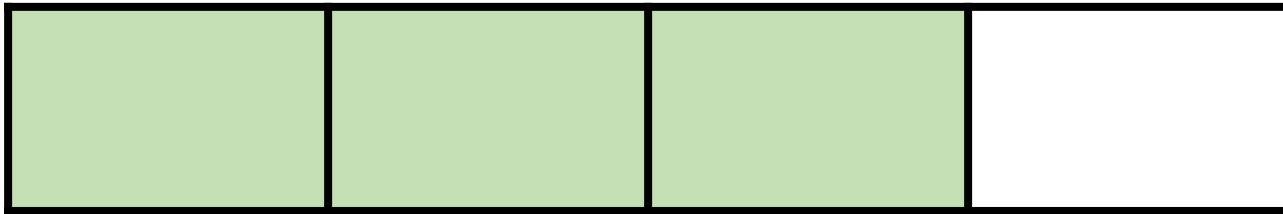


What do you notice?

$$\begin{array}{ccccccccc}
 & & \times 2 & \times 3 & \times 5 & \times 10 & & & \\
 & \text{---} & \text{---} & \text{---} & \text{---} & \text{---} & \text{---} & \text{---} & \\
 & 1 & 2 & 3 & 5 & 10 & & & \\
 \times 4 & \left( \frac{1}{4} = \frac{2}{8} = \frac{3}{12} = \frac{5}{20} = \frac{10}{40} \right) \div 4 & & & & & & & \\
 & \text{---} & \text{---} & \text{---} & \text{---} & \text{---} & \text{---} & \text{---} & \\
 & 4 & 8 & 12 & 20 & 40 & & & \\
 & & \times 2 & \times 3 & \times 5 & \times 10 & & & 
 \end{array}$$

$$\begin{array}{r} 3 \\ - \\ 4 \end{array} = \begin{array}{r} 12 \\ - \\ \square \end{array}$$

*(Note: Blue arrows in the original image point from 3 to 12 and from 4 to the box, both labeled "x 4")*



Have a think



$$\begin{array}{r} 3 \\ \hline 4 \end{array} = \begin{array}{r} \square \\ \hline 12 \end{array}$$

$\times 3$

$\times 3$

$$\begin{array}{r} \square \\ \hline 5 \end{array} = \begin{array}{r} 9 \\ \hline 15 \end{array}$$

$\div 3$

$\div 3$



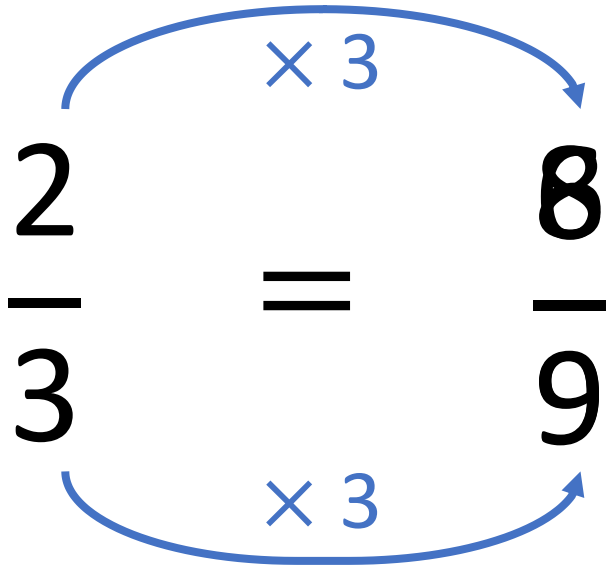
**YOUR TURN**

Have a go at questions  
1 - 4 on the worksheet

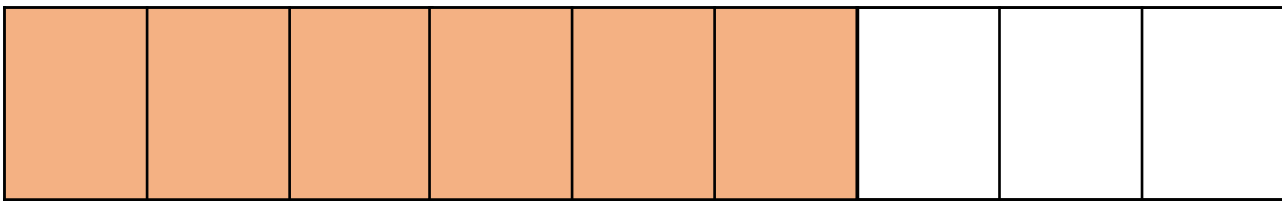
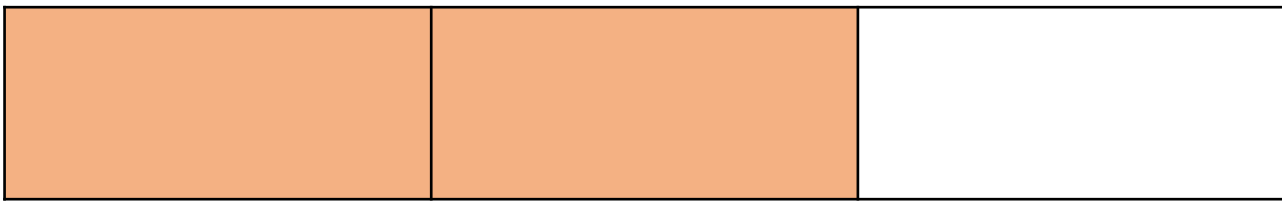
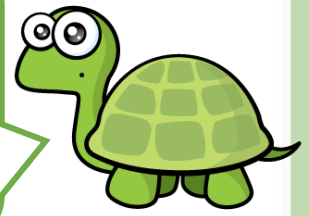




Have a think



I added 6 to both the numerator and denominator.



$$\frac{12}{15} = \frac{40}{\square} = \frac{\square}{5}$$

$\div 3 \times 10$

$\div 8 \times 10$

The diagram shows the fraction  $\frac{12}{15}$  on the left. A blue arrow points from the numerator 12 to the numerator 40, labeled with  $\div 3$ . Another blue arrow points from the denominator 15 to the denominator  $\square$ , labeled with  $\times 10$ . Below the fraction  $\frac{40}{\square}$ , a blue arrow points from the denominator  $\square$  to the denominator 5, labeled with  $\div 8$ . A second blue arrow points from the numerator  $\square$  to the numerator 40, labeled with  $\times 10$ . The three fractions are connected by equals signs.

**YOUR TURN**

Have a go at the rest of  
questions on the  
worksheet

