

# EQUIVALENT FRACTIONS



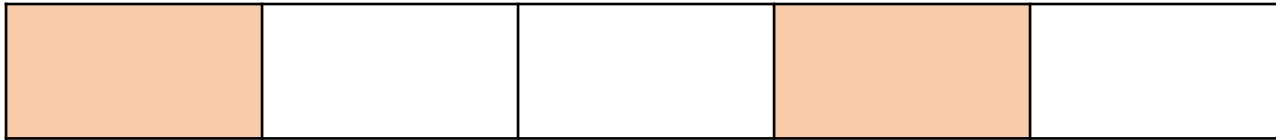
**GET READY**



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?



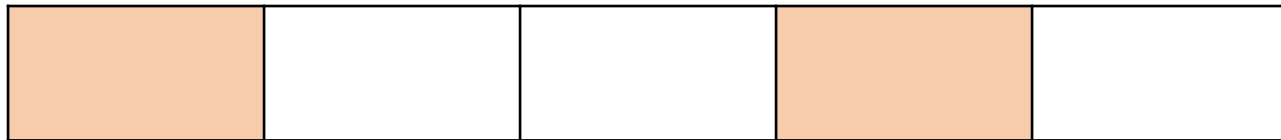
3) What fraction of the bar is shaded blue?



1) Circle the non-unit fractions

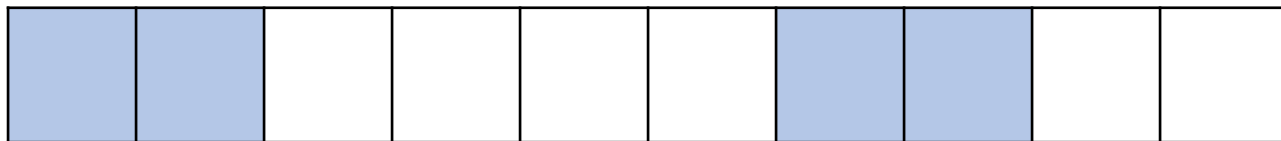
$$\frac{2}{5} \quad \frac{1}{7} \quad \frac{4}{5} \quad \frac{5}{6} \quad \frac{1}{9}$$

2) What fraction of the bar is shaded orange?



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

3) What fraction of the bar is shaded blue?



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

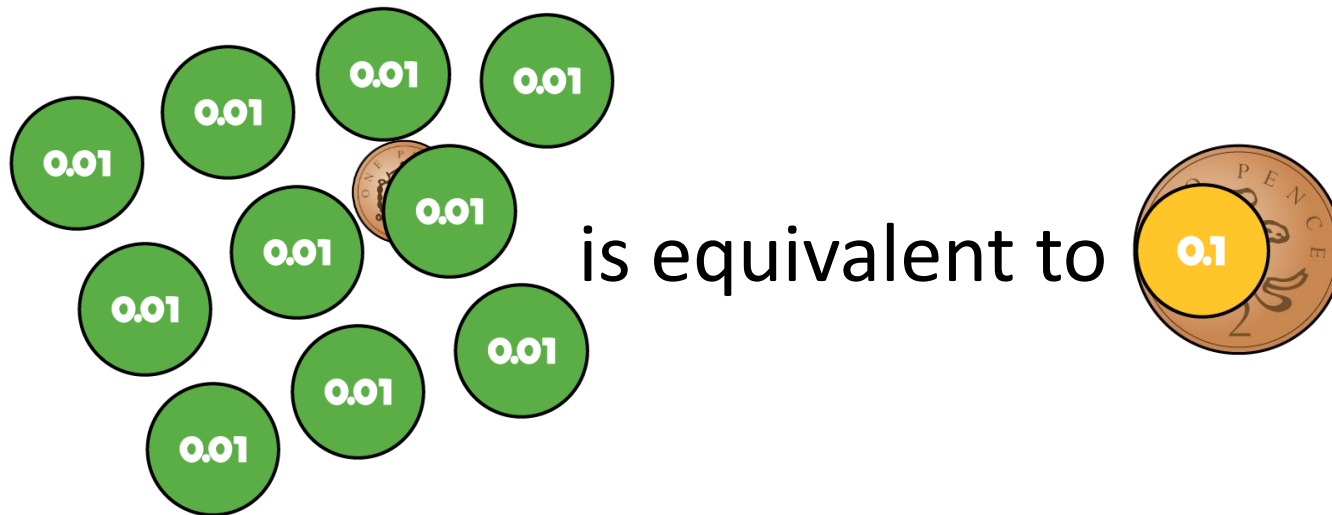
LET'S LEARN



# Equivalent fractions

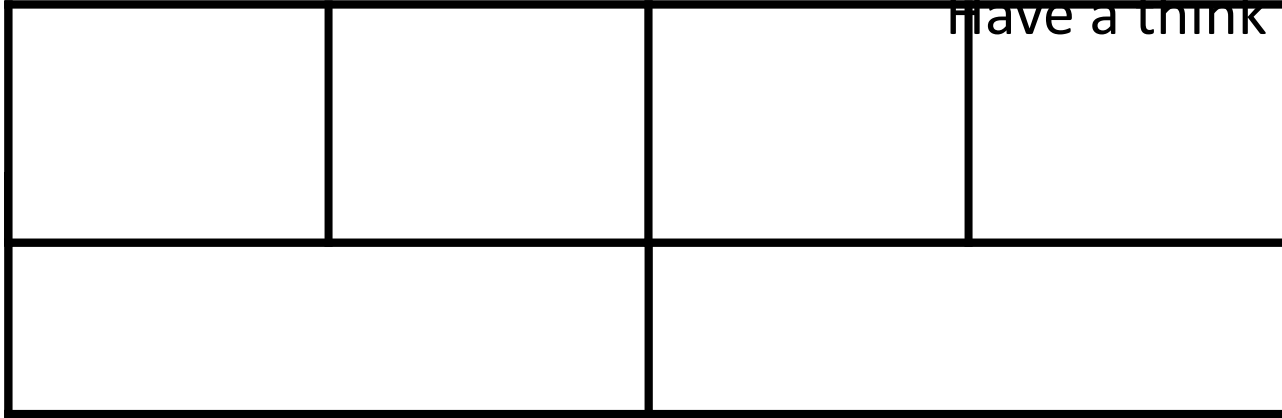
Equivalent doesn't necessarily mean 'the same' or 'identical'.

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

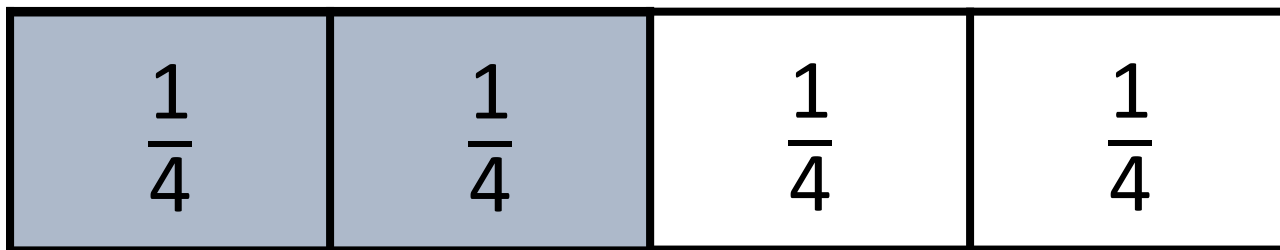
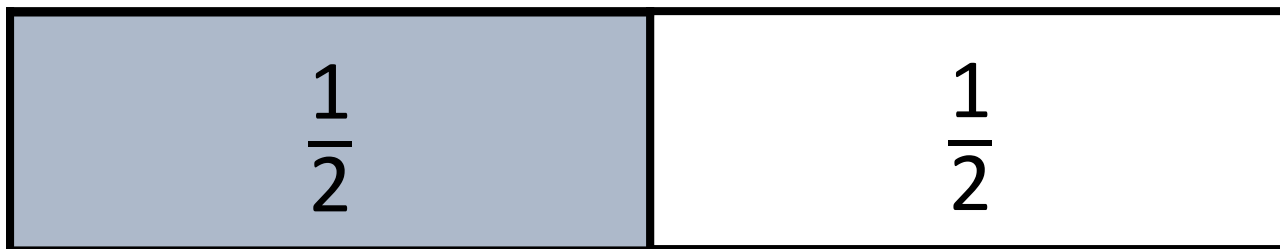




Have a think



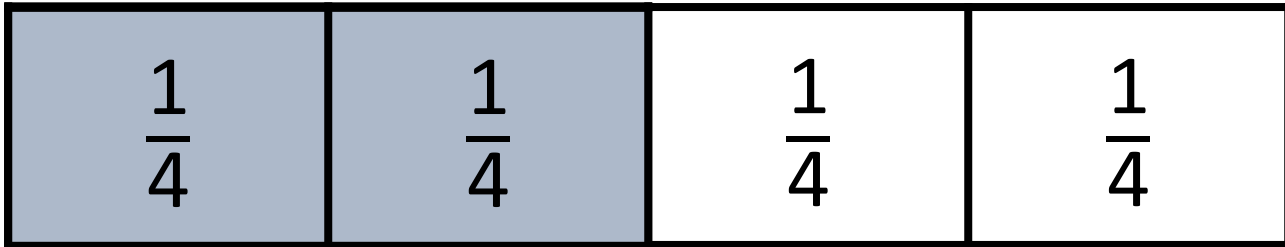
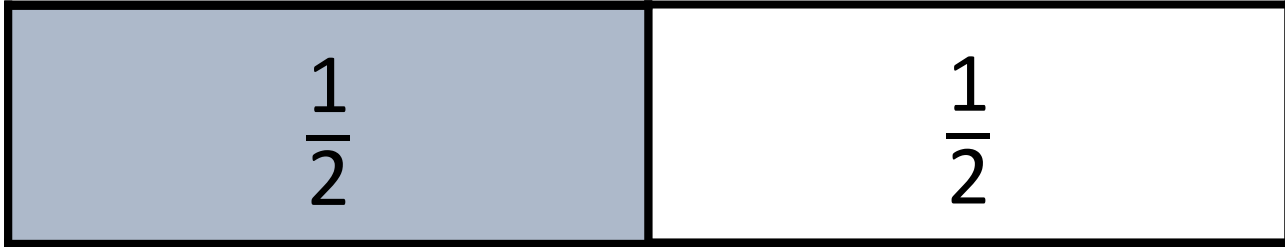
Here is a strip of paper.  
What do you notice?  
I cut it into 4 equal pieces.

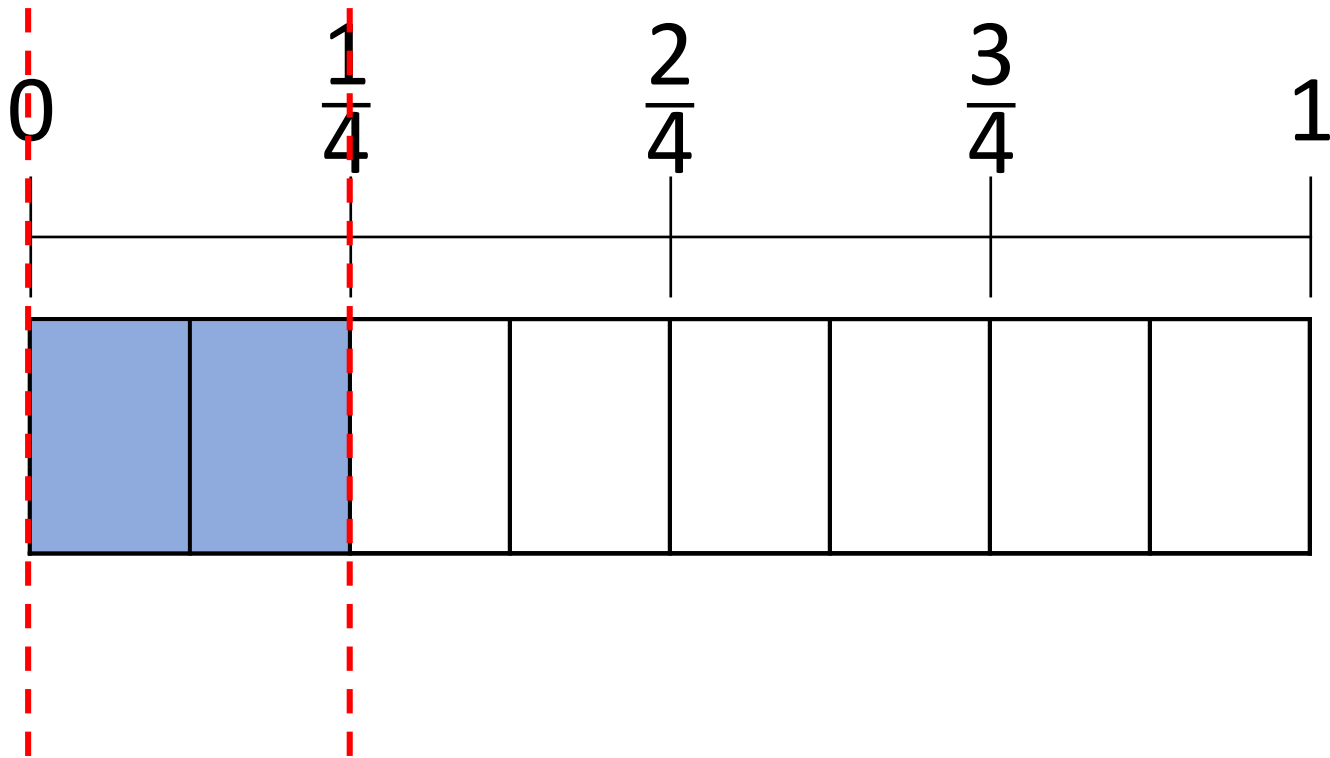


$\frac{1}{2}$  is equivalent to  $\frac{2}{4}$

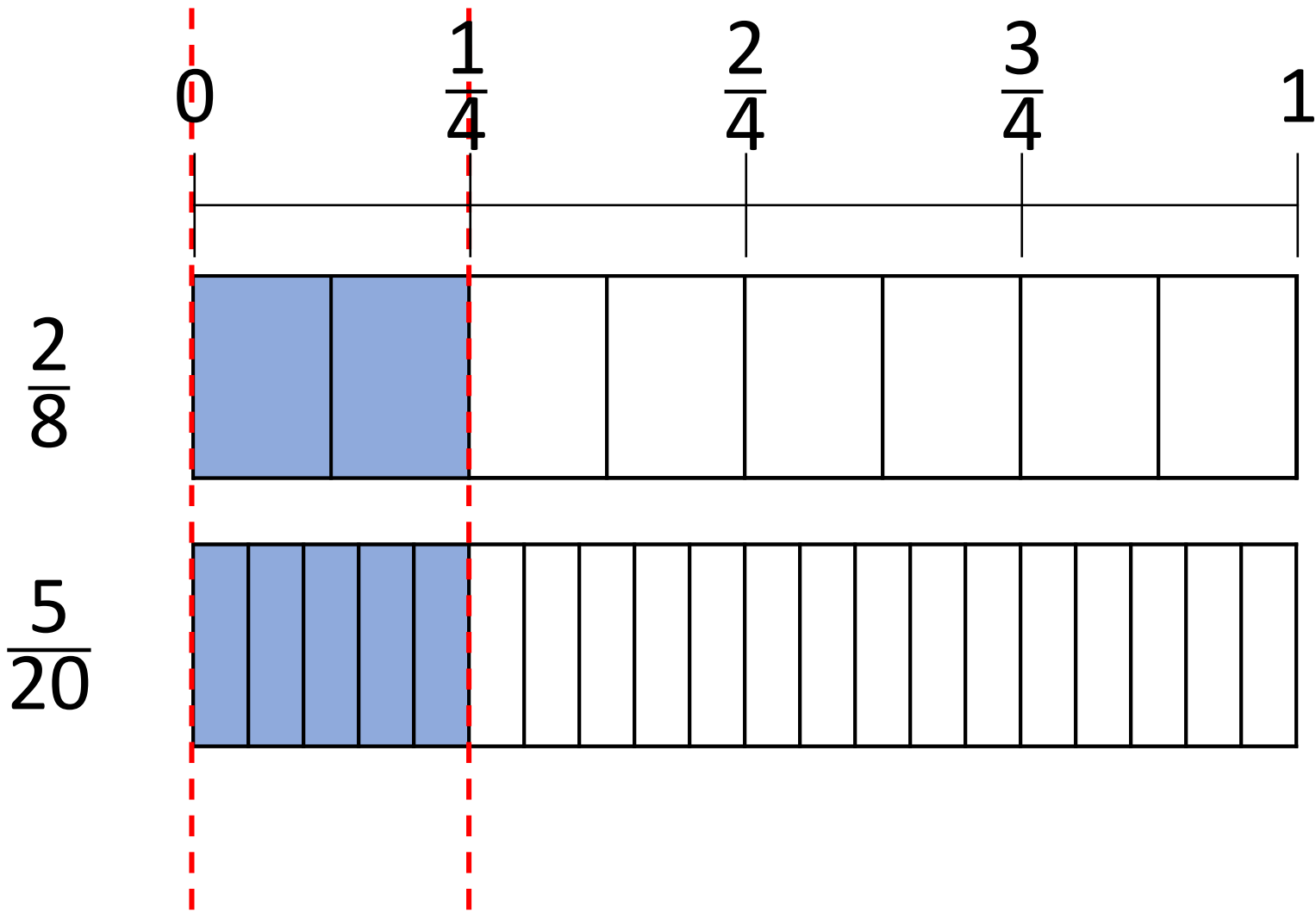
$$\times 2 \left( \frac{1}{2} \right) \div 2$$

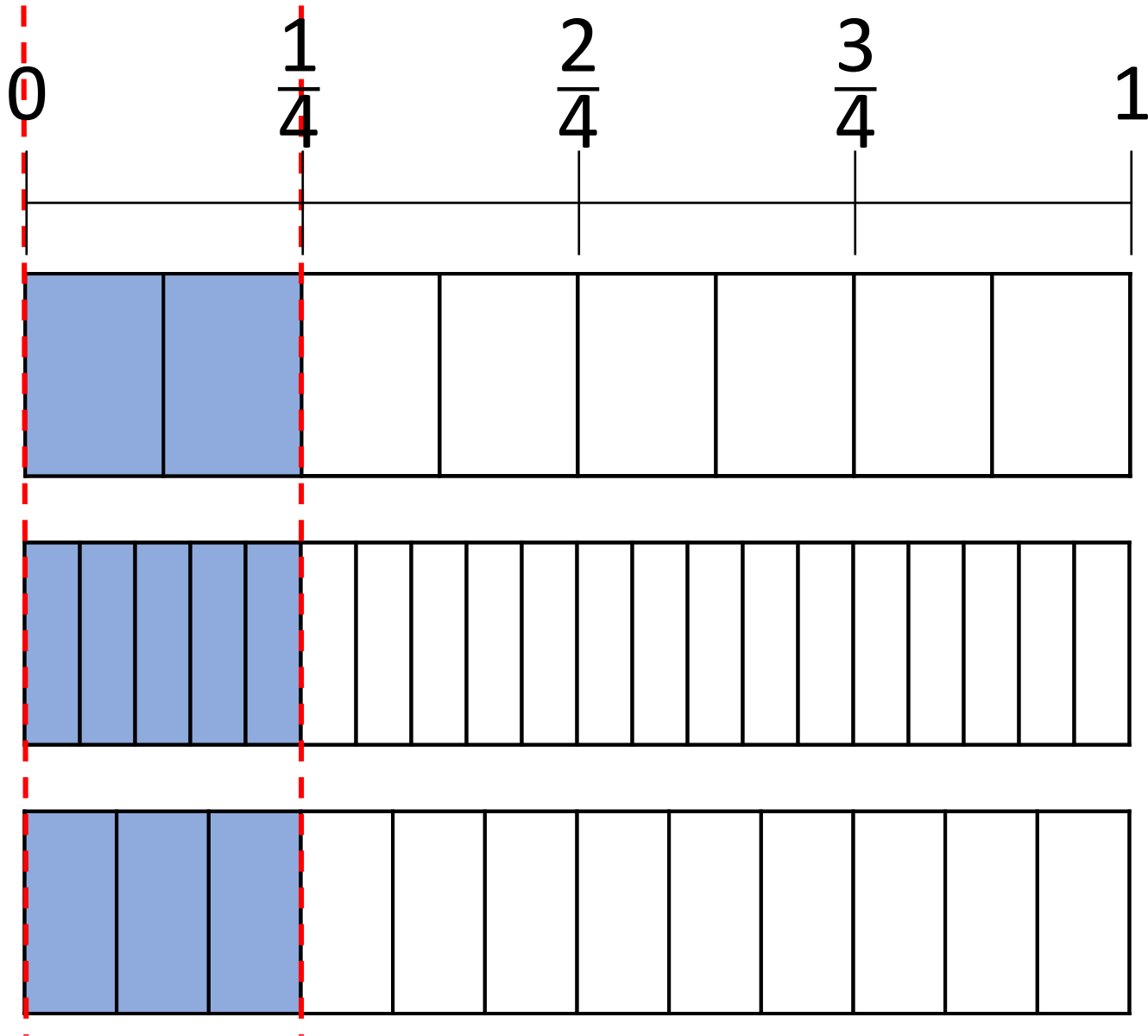
$$\div 2 \left( \frac{2}{4} \right) \times 2$$





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





Have a think



$$\frac{1}{4} = \frac{\square}{8} = \frac{3}{\square} = \frac{\square}{20} = \frac{\square}{40}$$

Have a think



What do you notice?

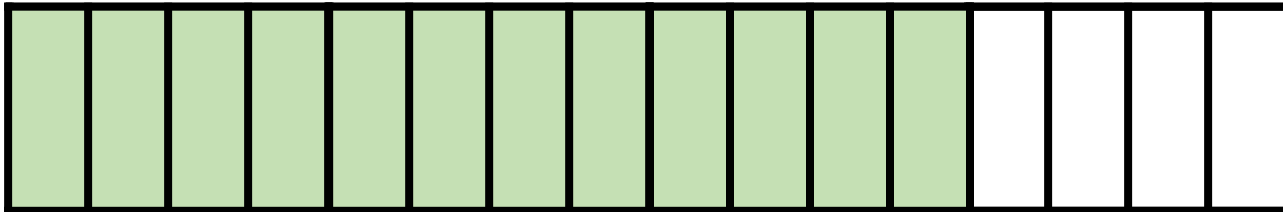
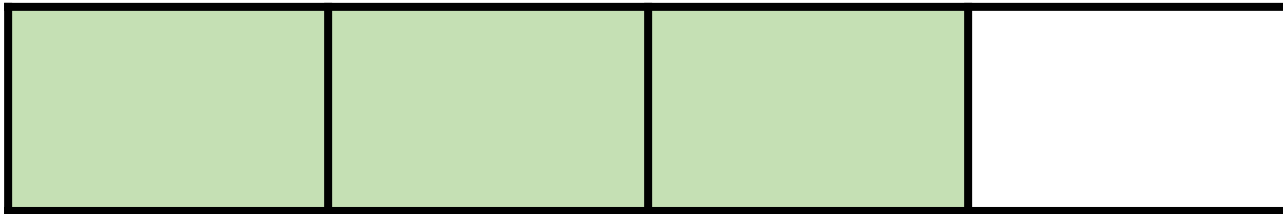
$$\begin{array}{cccccc}
 & \times 2 & \times 3 & \times 5 & \times 10 & \\
 \frac{1}{4} & = & \frac{2}{8} & = & \frac{3}{12} & = & \frac{5}{20} & = & \frac{10}{40} & \div 4 \\
 \times 4 & & & & & & & & & \\
 & \times 2 & \times 3 & \times 5 & \times 10 & 
 \end{array}$$

The diagram shows a sequence of fractions:  $\frac{1}{4} = \frac{2}{8} = \frac{3}{12} = \frac{5}{20} = \frac{10}{40}$ . Above the numerators (1, 2, 3, 5, 10) and below the denominators (4, 8, 12, 20, 40) are blue arrows pointing from left to right, labeled with the multipliers  $\times 2$ ,  $\times 3$ ,  $\times 5$ , and  $\times 10$ . On the far left, a blue arrow labeled  $\times 4$  points from the denominator 4 to the denominator 8. On the far right, a blue arrow labeled  $\div 4$  points from the numerator 10 to the numerator 5.

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

$\times 4$

$\times 4$



Have a think



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

$\times 3$  (top arrow)

$\times 3$  (bottom arrow)

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

$\div 3$  (top arrow)

$\div 3$  (bottom arrow)

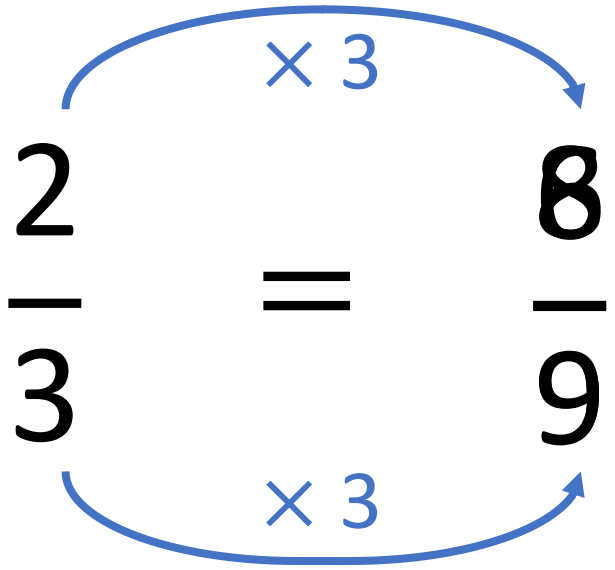
**YOUR TURN**

Have a go at questions  
1 - 4 on the worksheet

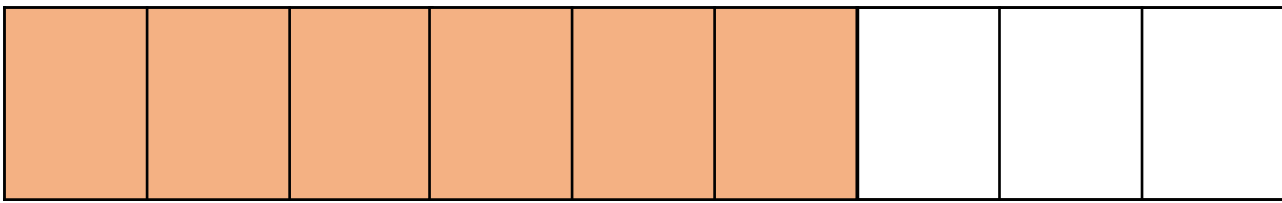
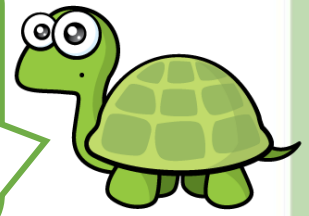




Have a think



I added 6 to both the numerator and denominator.



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

$\div 3 \times 10$

$\div 8 \times 10$

**YOUR TURN**

Have a go at the rest of  
questions on the  
worksheet

