

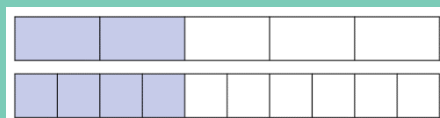
## Showing equivalence with accurate diagrams

## WORKED EXAMPLE

To **draw** fractions accurately, the whole needs to be divided into **equal parts**.



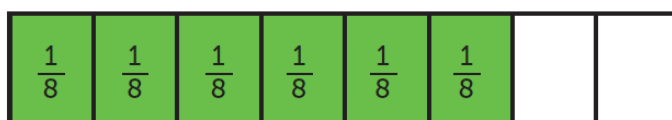
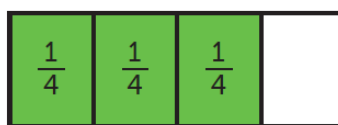
To **compare** fractions accurately, the **wholes must be equal**.



$$\frac{2}{5} \text{ is equal to } \frac{4}{10}$$

## REHEARSE

Show three quarters as equal to six eighths.



Explain what is wrong with the diagram.

Draw an accurate diagram to show that three quarters ( $\frac{3}{4}$ ) are equal to six eighths ( $\frac{6}{8}$ ).

## REHEARSE

Show that:

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

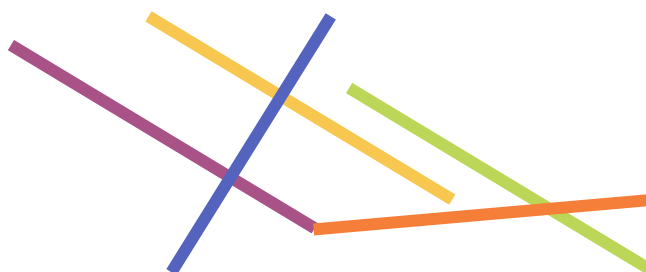

$\frac{8}{10}$  is equivalent to  $\frac{4}{5}$


Which set was easier to draw? Why?

## RETRIEVE

Can I still identify parallel lines?

What colours are the parallel lines?



## APPLY AND EXPLORE

Draw diagrams to show two fractions equivalent to  $\frac{3}{4}$ .

## APPLY AND EXPLORE

Use what you know about the relationship between the numerator and denominator in equivalent fractions to complete the missing numbers.

$$\frac{\quad}{20} = \frac{1}{2}$$

$$\frac{2}{3} = \frac{\quad}{9}$$

$$\frac{3}{4} = \frac{18}{\quad}$$

Choose one and prove you are correct.