

Equivalent fractions (2)



1 Shade the bar models to represent the fractions.

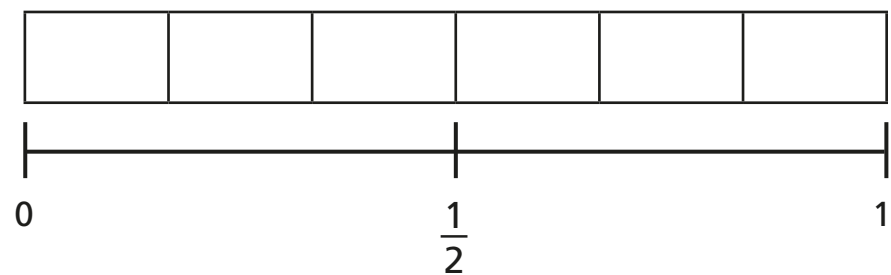
a) Shade $\frac{1}{2}$ of the bar model.



b) Shade $\frac{2}{4}$ of the bar model.



c) Shade $\frac{3}{6}$ of the bar model.

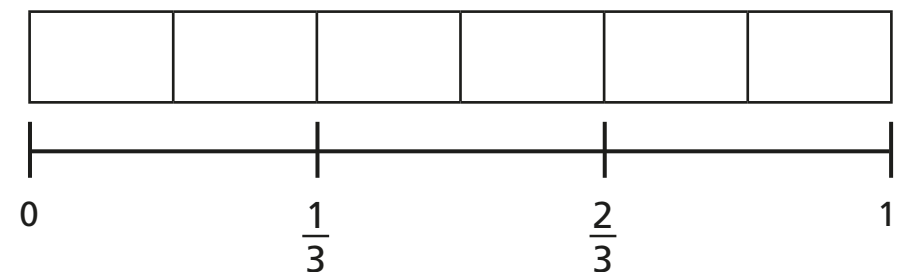


d) What do you notice?

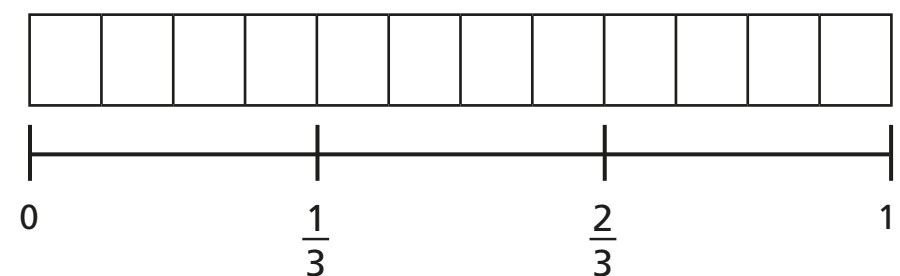
e) Write another fraction that is equivalent to $\frac{1}{2}$

2 Shade $\frac{2}{3}$ of each bar model.

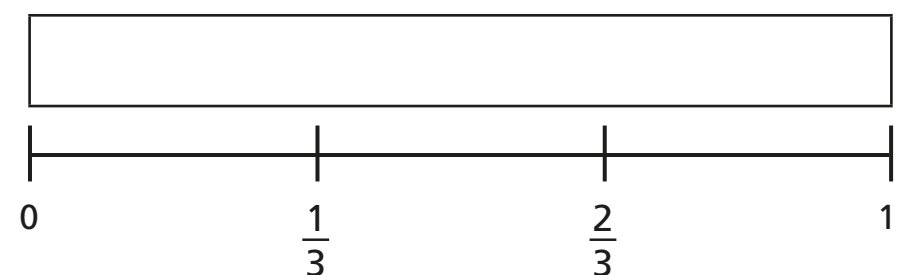
a)



b)



c)

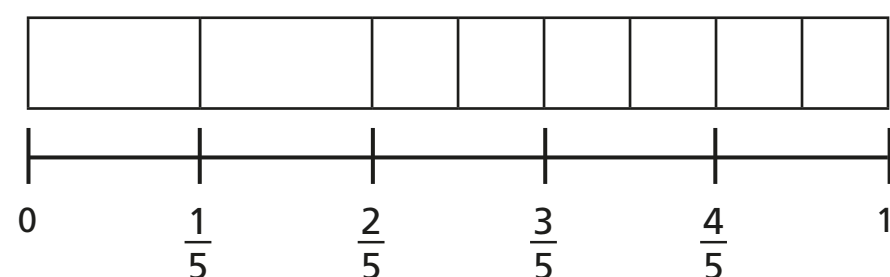
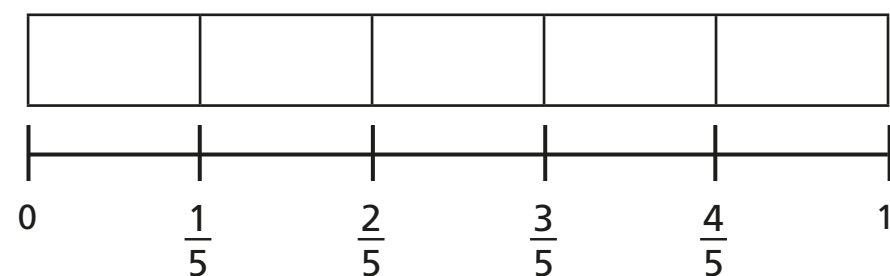


d) Use your answers to parts a), b) and c) to complete the equivalent fractions.

$$\frac{2}{3} = \frac{\square}{6} = \frac{8}{\square} = \frac{\square}{15}$$



- 3 Mo is finding equivalent fractions.



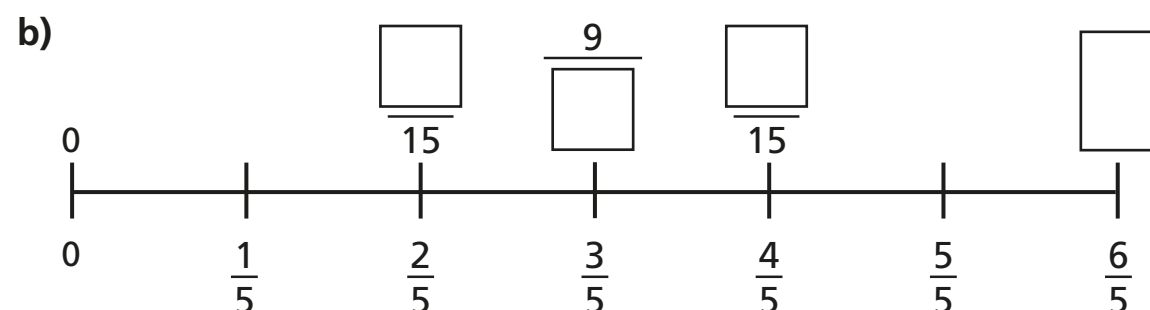
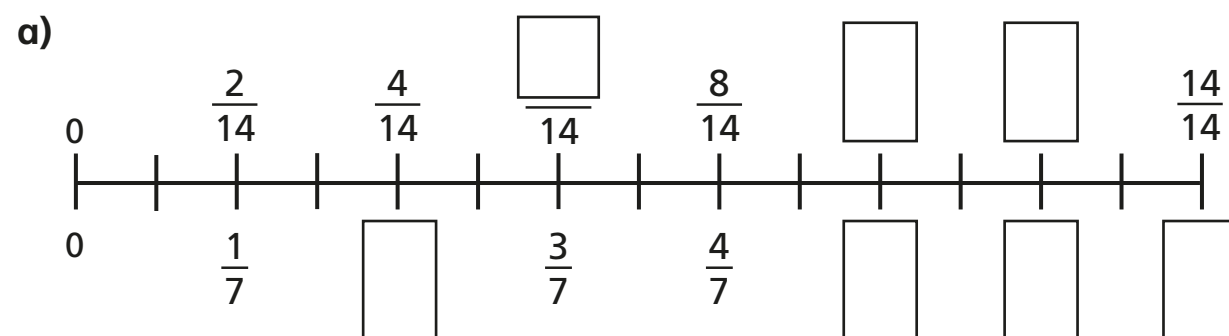
$\frac{6}{8}$ is equivalent to $\frac{4}{5}$

Do you agree with Mo? _____

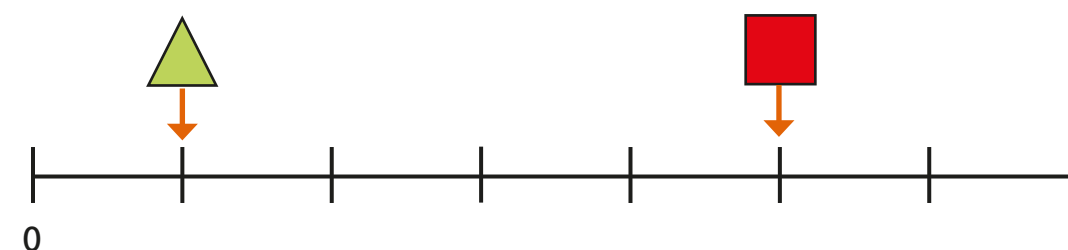
Explain your answer.



- 4 Find the missing numbers.



- 5 Here is a number line.



- a) What fraction is each shape pointing to?

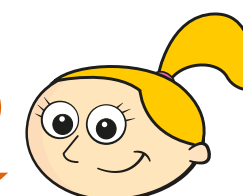
 =  =

- b) A circle is halfway between the triangle and the square.

Draw the circle on the number line.

- c)

The circle is pointing to $\frac{9}{21}$



Do you agree with Eva? _____

Show how you worked this out.

- d) Write three equivalent fractions for each shape.

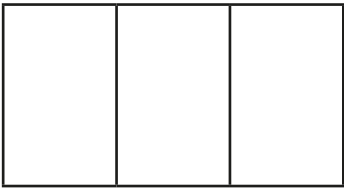
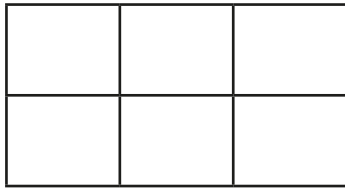
Compare answers with a partner.

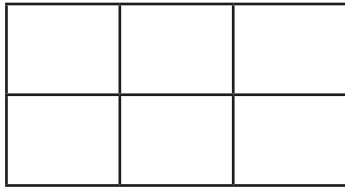


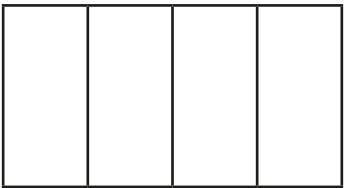
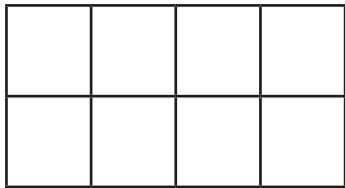
Equivalent fractions (3)

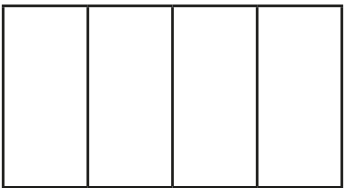
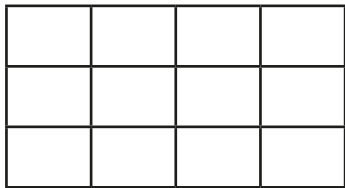


1 Shade the shapes to help you complete the equivalent fractions.

a)   $\frac{1}{3} = \frac{\square}{\square}$

b)   $\frac{1}{2} = \frac{\square}{\square}$

c)   $\frac{3}{4} = \frac{\square}{\square}$

d)   $\frac{3}{4} = \frac{\square}{\square}$

2 Use the fraction wall to complete the equivalent fractions.

$\frac{1}{3}$			$\frac{1}{3}$			$\frac{1}{3}$		
$\frac{1}{6}$	$\frac{1}{6}$		$\frac{1}{6}$	$\frac{1}{6}$		$\frac{1}{6}$	$\frac{1}{6}$	
$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$

a) $\frac{1}{3} = \frac{\square}{6}$

d) $\frac{2}{3} = \frac{6}{\square}$

b) $\frac{1}{3} = \frac{\square}{9}$

e) $\frac{4}{6} = \frac{6}{\square}$

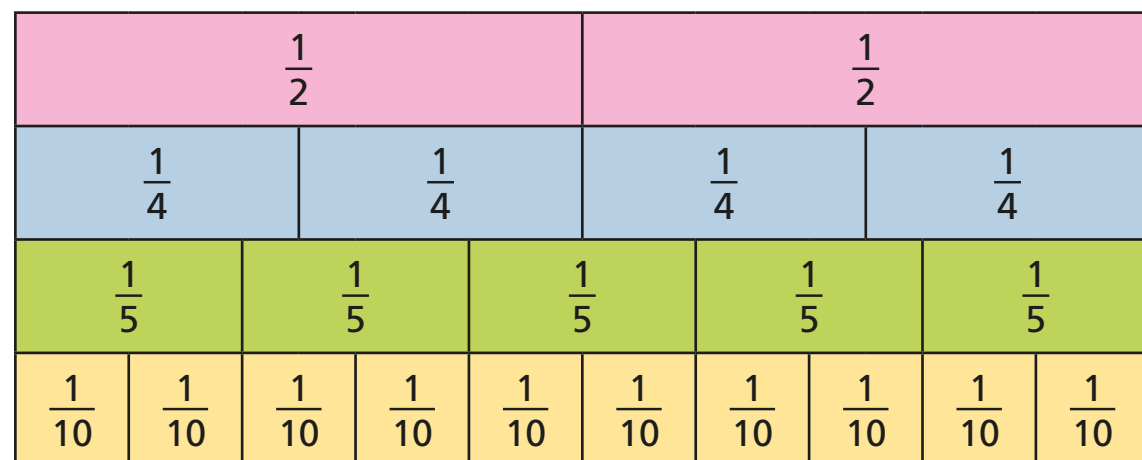
c) $\frac{2}{3} = \frac{4}{\square}$

f) $\frac{1}{3} = \frac{\square}{6} = \frac{\square}{9}$

3 Draw a picture to show that one quarter is equivalent to two eighths.




- 4 Use the fraction wall to decide whether the fractions are equivalent or not.

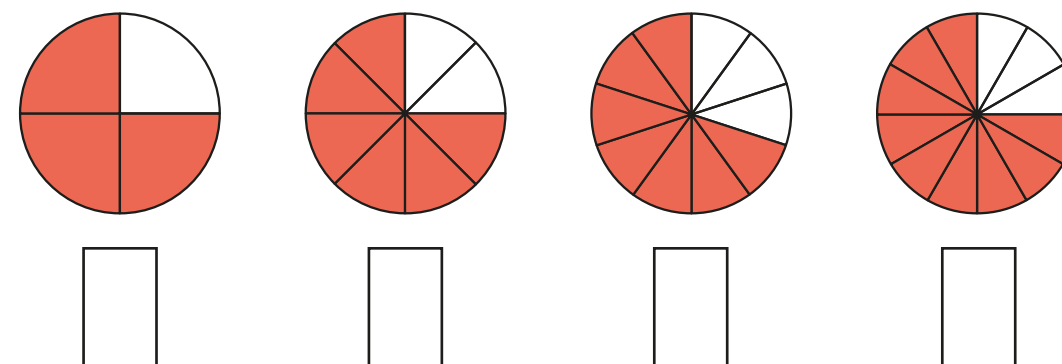


Complete the sentences using **is** or **is not**.

- a) $\frac{1}{2}$ _____ equivalent to $\frac{2}{4}$
- b) $\frac{1}{4}$ _____ equivalent to $\frac{2}{10}$
- c) $\frac{1}{2}$ _____ equivalent to $\frac{5}{10}$
- d) $\frac{3}{10}$ _____ equivalent to $\frac{2}{5}$
- e) $\frac{4}{5}$ _____ equivalent to $\frac{8}{10}$
- f) $\frac{3}{4}$ _____ equivalent to $\frac{4}{5}$

Write some sentences of your own and ask a partner to fill in the gaps.

- 5 a) What fraction of each shape is shaded?



- b) Use the fractions in part a) to complete the sentences.

	is equivalent to	
	is equivalent to	
	is not equivalent to	
	is not equivalent to	

Compare answers with a partner.

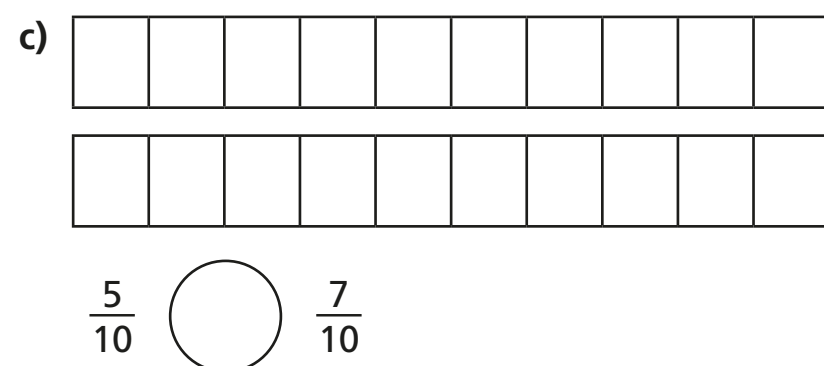
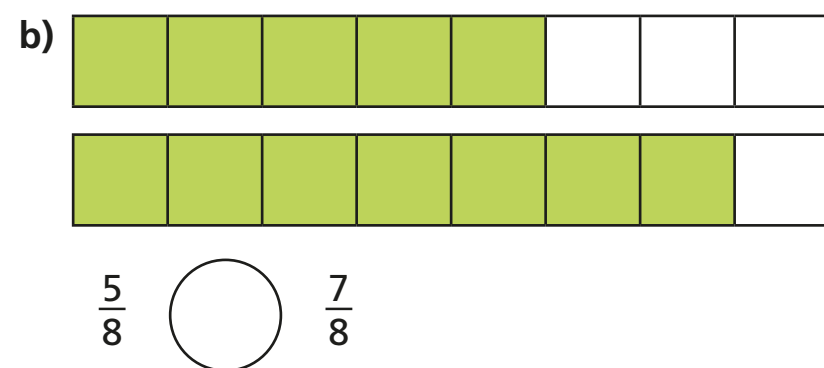
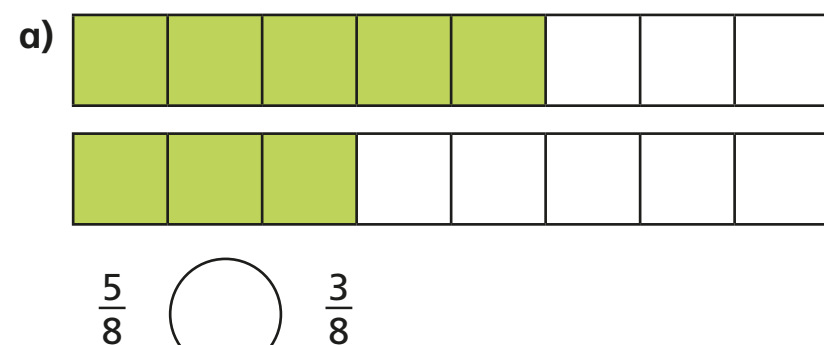
- 6 The bar model represents $\frac{1}{2}$

Write as many equivalent fractions as you can.

What is the same about all the fractions you have written?

Compare fractions

- 1** Write $<$, $>$ or $=$ to compare the fractions.
Use the bar models to help you.



- 2** Write $<$, $>$ or $=$ to compare the fractions.

a) $\frac{1}{5}$ $\frac{3}{5}$

d) $\frac{6}{7}$ $\frac{2}{7}$

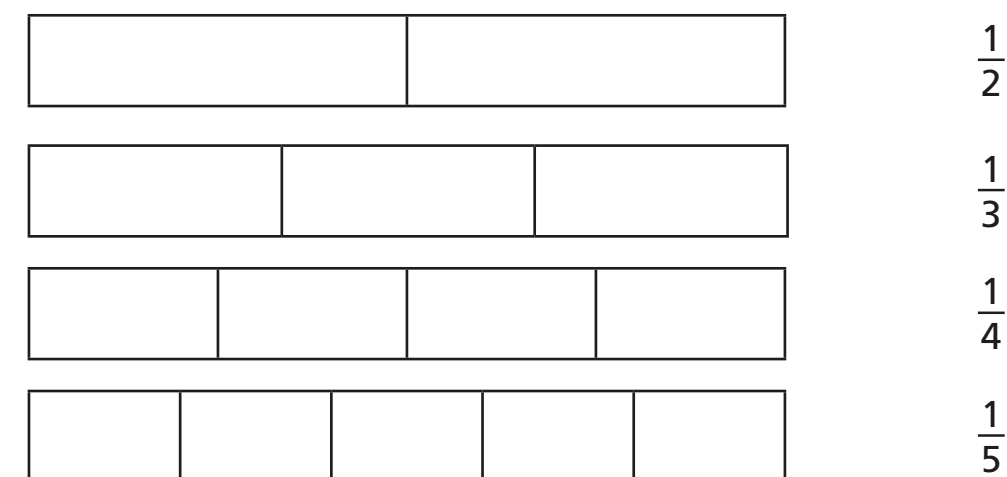
b) $\frac{2}{5}$ $\frac{2}{5}$

e) $\frac{6}{13}$ $\frac{12}{13}$

c) $\frac{2}{7}$ $\frac{6}{7}$

f) $\frac{13}{15}$ $\frac{13}{15}$

- 3** Here are some bar models.



- a) Shade the bar models to represent the fractions.

- b) Write $<$ or $>$ to compare the fractions.

Use the bar models to help you.

$\frac{1}{2}$ $\frac{1}{3}$

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

$\frac{1}{5}$ $\frac{1}{3}$

$\frac{1}{3}$ $\frac{1}{2}$

$\frac{1}{4}$ $\frac{1}{5}$

$\frac{1}{5}$ $\frac{1}{2}$



- 4 What could the missing numerators and denominators be?
Give three examples for each.

a) $\frac{1}{5} < \frac{\square}{5}$ $\frac{1}{5} < \frac{\square}{5}$ $\frac{1}{5} < \frac{\square}{5}$

b) $\frac{1}{5} < \frac{1}{\square}$ $\frac{1}{5} < \frac{1}{\square}$ $\frac{1}{5} < \frac{1}{\square}$

- 5 Jack is comparing fractions.

$\frac{1}{8}$ is greater than $\frac{1}{4}$
because 8 is greater than 4

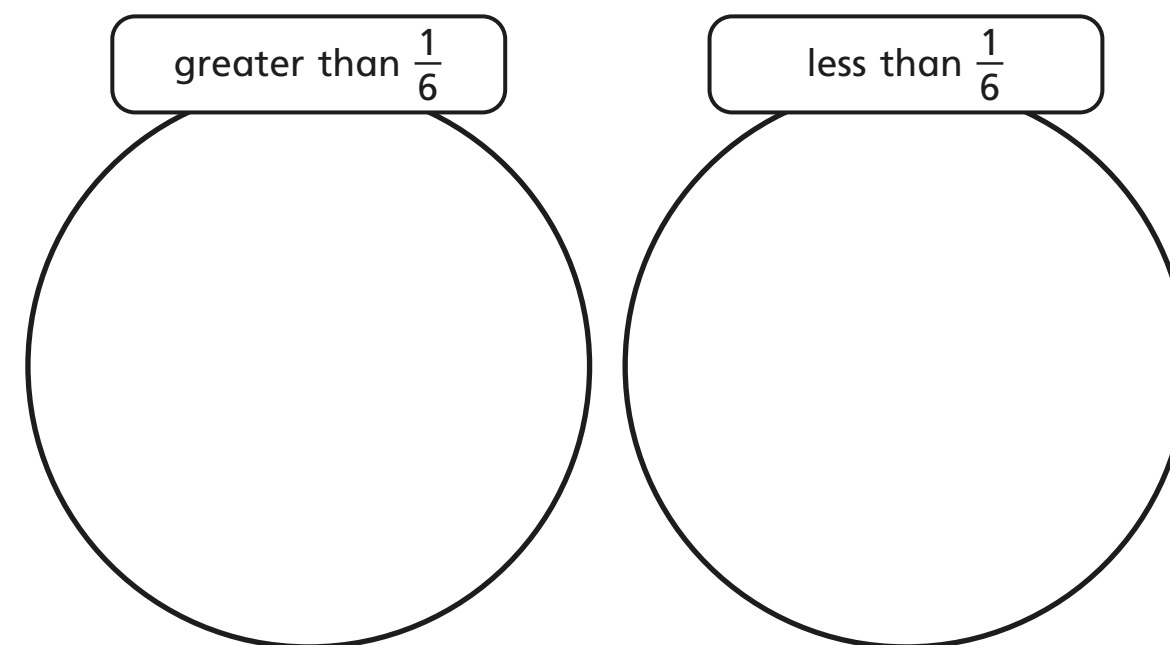


Draw bar models to show that Jack is wrong.



- 6 Sort the fractions into the circles.

$\frac{5}{6}$ $\frac{1}{8}$ $\frac{1}{2}$ $\frac{2}{6}$ $\frac{1}{12}$ $\frac{3}{6}$



- 7 Complete the sentences using the word bank.

numerator denominator greater smaller

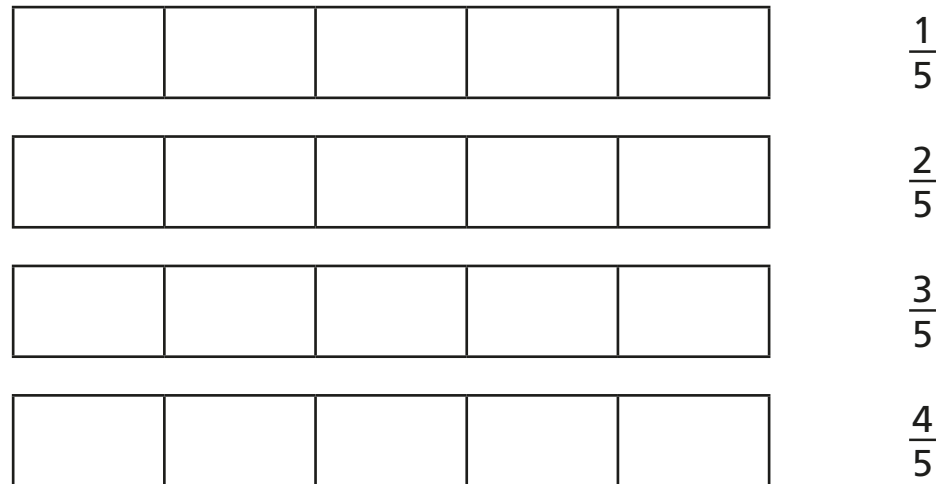
a) When fractions have the same denominator, the greater
the _____, the _____ the fraction.

b) When fractions have the same numerator, the greater the
_____, the _____ the fraction.



Order fractions

1 a) Shade the bar models to represent the fractions.



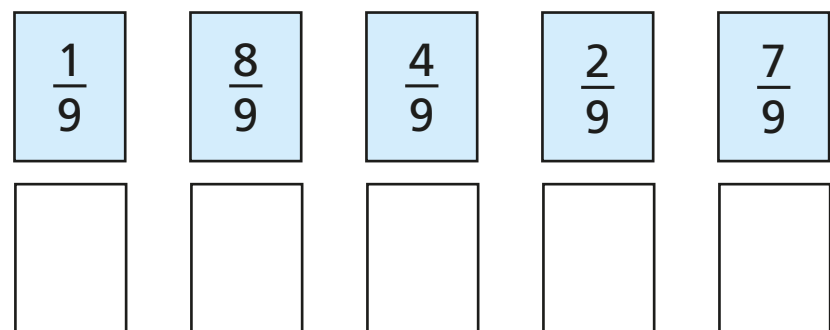
b) What do you notice?

c) Complete the sentence.

numerator denominator greater smaller

When fractions have the same _____, the
_____ the _____ the _____
the fraction.

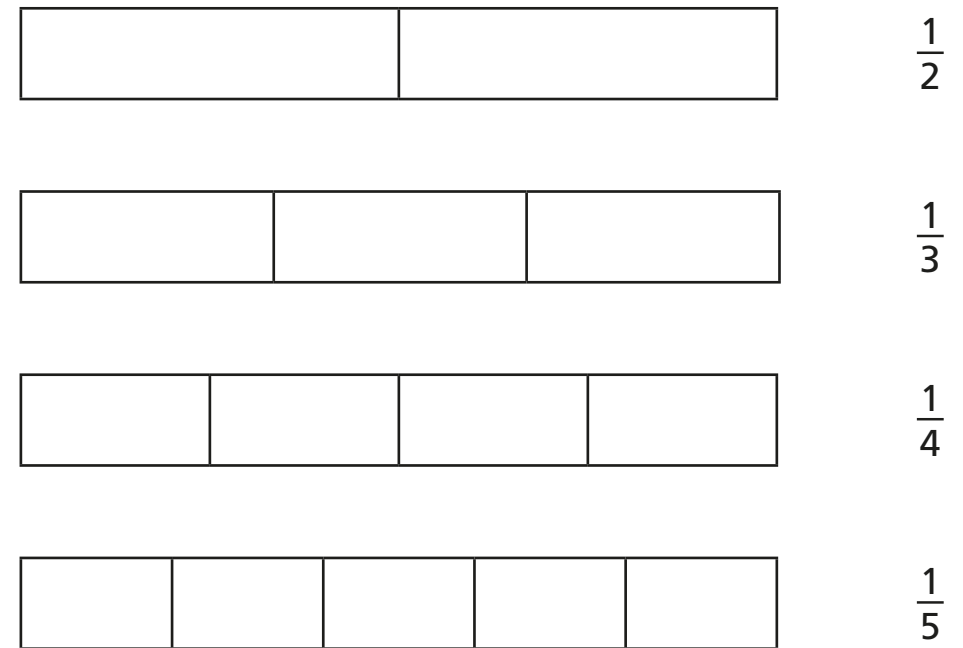
2 Write the fractions in order, starting with the smallest.



smallest

greatest

3 a) Shade the bar models to represent the fractions.



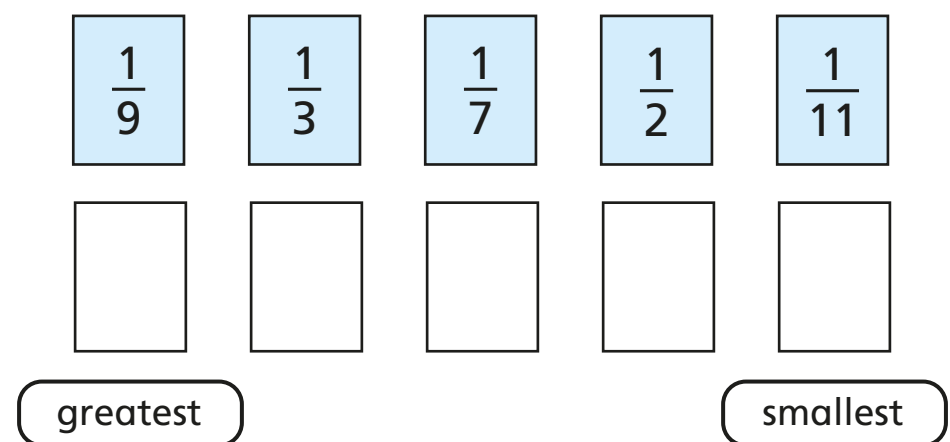
b) What do you notice?

c) Complete the sentence.

numerator denominator greater smaller

When fractions have the same _____, the
_____ the _____ the _____
the fraction.

4 Write the fractions in order, starting with the greatest.



greatest

smallest

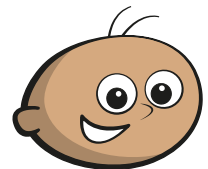
- 5 Tommy and Dora are ordering fractions.

$$\frac{1}{5}$$

$$\frac{4}{15}$$

$$\frac{2}{3}$$

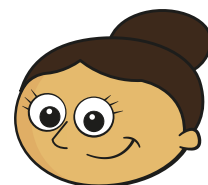
$$\frac{7}{15}$$



Tommy

I cannot order these fractions because the numerators and denominators are different.

I think I can use equivalent fractions to help me.



Dora

Who do you agree with? _____

Talk about it with a partner.

- 6 a) Complete the equivalent fractions.

$$\frac{3}{5} = \frac{6}{\square}$$

$$\frac{2}{9} = \frac{6}{\square}$$

$$\frac{1}{7} = \frac{6}{\square}$$

- b) Write the fractions in order, starting with the greatest.

$$\frac{6}{9}$$

$$\frac{3}{5}$$

$$\frac{1}{7}$$

$$\frac{2}{9}$$

greatest

smallest

- 7 Dexter and Alex are ordering fractions from smallest to greatest.

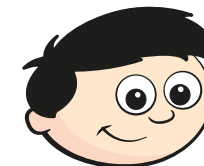
$$\frac{1}{7}$$

$$\frac{2}{21}$$

$$\frac{4}{35}$$

$$\frac{2}{7}$$

a)



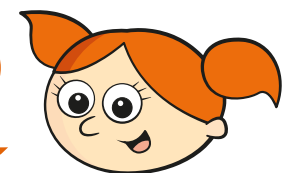
Dexter

I am going to make the numerators the same.

Use Dexter's method to put the fractions in order.

b)

I am going to make the denominators the same.



Alex

Use Alex's method to put the fractions in order.

- c) Which method do you prefer? Talk about it with a partner.

