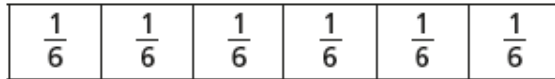
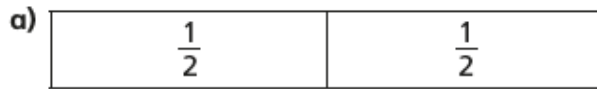


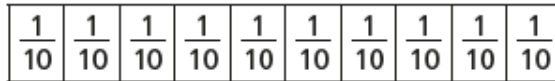
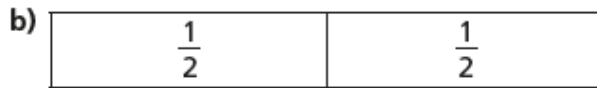
Lesson 2 – Equivalent Fractions (1)

Equivalent fractions (1)

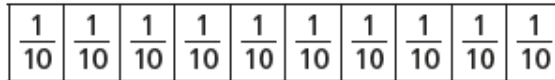
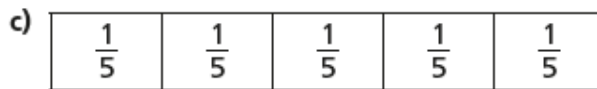
1 Shade the bar models to represent the equivalent fractions.



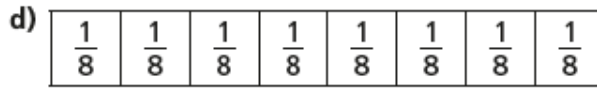
$$\frac{1}{2} = \frac{3}{6}$$



$$\frac{1}{2} = \frac{5}{10}$$

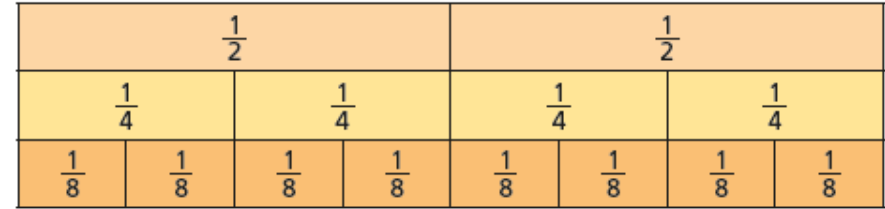


$$\frac{4}{5} = \frac{8}{10}$$



$$\frac{6}{8} = \frac{3}{4}$$

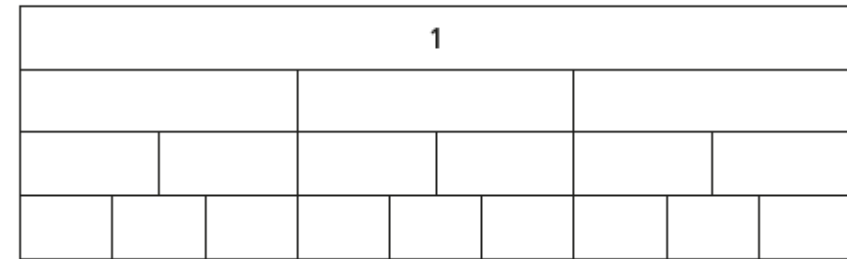
2 Use the fraction wall to complete the equivalent fractions.



a) $\frac{1}{2} = \frac{\square}{4}$ c) $\frac{2}{4} = \frac{4}{\square}$ e) $\frac{\square}{8} = \frac{3}{4}$

b) $\frac{1}{2} = \frac{\square}{8}$ d) $\frac{2}{8} = \frac{\square}{4}$ f) $\frac{2}{2} = \frac{\square}{4} = \frac{\square}{8}$

3 a) Label the fractions on the fraction wall.

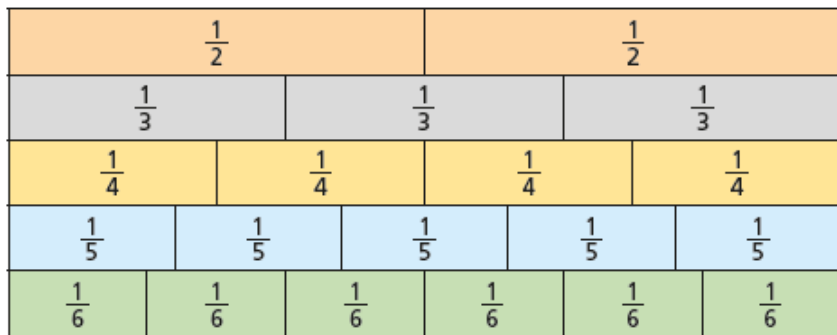


b) Use the fraction wall to complete the equivalent fractions.

$\frac{1}{3} = \frac{\square}{6} = \frac{3}{\square}$ $\frac{\square}{3} = \frac{4}{\square} = \frac{6}{9}$

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

4 Here is a fraction wall.



Is each statement true or false? Tick your answers.

- | | True | False |
|---|--------------------------|--------------------------|
| a) $\frac{1}{2}$ is equivalent to $\frac{3}{6}$ | <input type="checkbox"/> | <input type="checkbox"/> |
| b) $\frac{2}{3}$ is equivalent to $\frac{3}{4}$ | <input type="checkbox"/> | <input type="checkbox"/> |
| c) $\frac{2}{4}$ is equivalent to $\frac{3}{6}$ | <input type="checkbox"/> | <input type="checkbox"/> |
| d) $\frac{2}{3}$ is equivalent to $\frac{4}{5}$ | <input type="checkbox"/> | <input type="checkbox"/> |
| e) $\frac{2}{3}$ is equivalent to $\frac{4}{6}$ | <input type="checkbox"/> | <input type="checkbox"/> |
| f) $\frac{3}{5}$ is equivalent to $\frac{4}{6}$ | <input type="checkbox"/> | <input type="checkbox"/> |

Write your own equivalent fractions statements.

Ask a partner to say if they are true or false.



5 Are the statements always, sometimes or never true?

Circle your answer.

Draw a diagram to support your answer.

a) The greater the numerator, the greater the fraction.

always sometimes never

b) Fractions equivalent to one half have even numerators.

always sometimes never

c) If a fraction is equivalent to one half, the denominator will be double the numerator.

always sometimes never

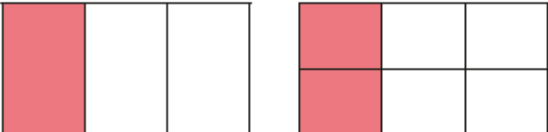


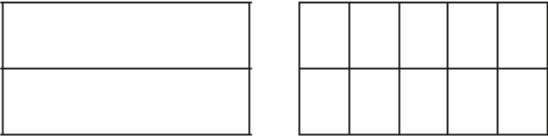
Lesson 3 – Equivalent Fractions (2)

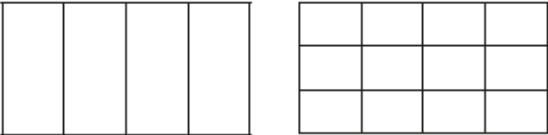
Equivalent fractions (2)

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

The first one has been done for you.

a)  $\frac{1}{3} = \frac{2}{6}$

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

c)  $\frac{1}{4} = \frac{\square}{\square}$

2 Draw a diagram to show that $\frac{3}{4} = \frac{6}{8}$



3 Match the equivalent fractions.

$\frac{1}{4}$

$\frac{4}{10}$

$\frac{10}{15}$

$\frac{1}{7}$

$\frac{3}{21}$

$\frac{2}{3}$

$\frac{2}{5}$

$\frac{3}{12}$

4 Complete the equivalent fractions.

a) $\frac{1}{5} = \frac{\square}{10}$

d) $\frac{3}{10} = \frac{9}{\square}$

g) $\frac{8}{12} = \frac{2}{\square}$

b) $\frac{4}{5} = \frac{\square}{10}$

e) $\frac{6}{8} = \frac{3}{\square}$

h) $\frac{2}{\square} = \frac{10}{25}$

c) $\frac{3}{10} = \frac{6}{\square}$

f) $\frac{8}{12} = \frac{\square}{3}$

i) $\frac{1}{\square} = \frac{4}{28}$

- 5 a) Write the fractions in the correct place on the sorting diagram.

$\frac{8}{24}$	$\frac{3}{12}$	$\frac{5}{15}$	$\frac{6}{24}$	$\frac{4}{12}$	$\frac{9}{36}$	$\frac{3}{9}$	$\frac{4}{16}$
----------------	----------------	----------------	----------------	----------------	----------------	---------------	----------------

	equivalent to $\frac{1}{3}$	equivalent to $\frac{1}{4}$
odd denominator		
even denominator		

- b) Are any of the boxes empty?

Why do you think this is?

Talk about your answer with a partner.



- 6 Find three ways to make the fractions equivalent.

a) $\frac{2}{\square} = \frac{4}{\square}$ $\frac{2}{\square} = \frac{4}{\square}$ $\frac{2}{\square} = \frac{4}{\square}$

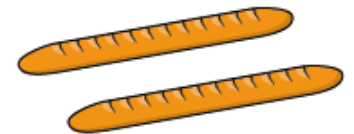
b) $\frac{1}{\square} = \frac{4}{\square}$ $\frac{1}{\square} = \frac{4}{\square}$ $\frac{1}{\square} = \frac{4}{\square}$

c) $\frac{\square}{3} = \frac{\square}{9}$ $\frac{\square}{3} = \frac{\square}{9}$ $\frac{\square}{3} = \frac{\square}{9}$

- 7 Eva and Ron have a baguette each.

The baguettes are the same size.

Eva cuts her baguette into 8 equal pieces.



3 of my equal pieces are equal to 6 of Eva's.



How many equal pieces has Ron cut his baguette into?

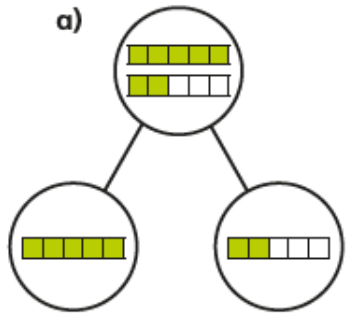
Ron has cut his baguette into equal pieces.



Lesson 4 – Fractions Greater Than 1

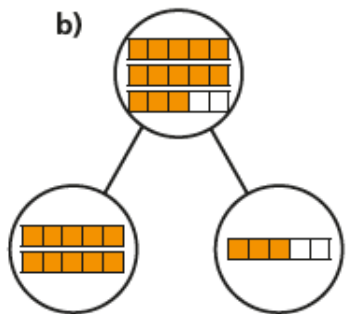
Fractions greater than 1

1 Complete the sentences.



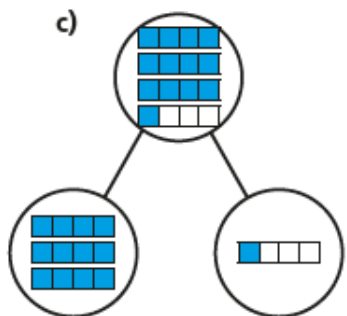
There are 7 fifths altogether.

7 fifths = whole + fifths



There are fifths altogether.

fifths = wholes +
 fifths

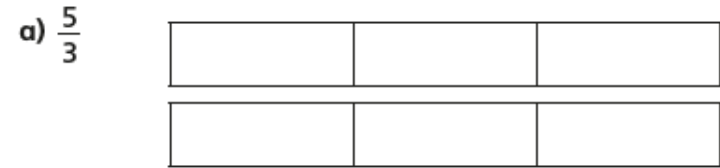


There are quarters altogether.

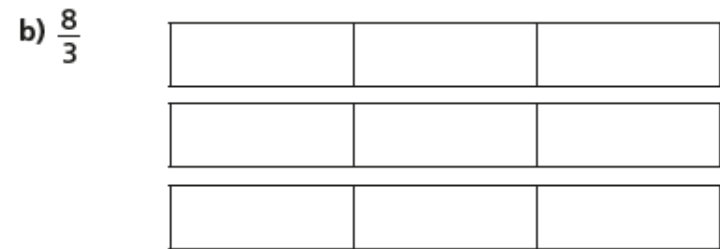
quarters = wholes +
 quarter

2 Shade the bar models to represent the fractions.

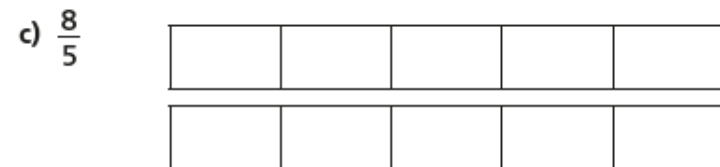
Complete the number sentences.



$$\frac{5}{3} = \text{ whole} + \text{ thirds} = \text{$$



$$\frac{8}{3} = \text{ wholes} + \text{ thirds} = \text{$$



$$\frac{8}{5} = \text{ whole} + \text{ fifths} = \text{$$

3 Complete the statements.

a) $\frac{12}{2} = \square$ wholes

e) $\frac{15}{3} = \square$ wholes

b) $\frac{12}{4} = \square$ wholes

f) $\frac{15}{5} = \square$ wholes

c) $\frac{12}{6} = \square$ wholes

g) $\frac{15}{4} = \square$ wholes + \square quarters

d) $\frac{12}{3} = \square$ wholes

h) $\frac{15}{2} = \square$ wholes + \square half

4 Whitney bakes 26 muffins.

Muffins are packed in boxes of 4



a) How many boxes can Whitney fill?

Whitney can fill \square boxes.

b) How many more muffins does Whitney need to fill another box?

Whitney needs \square muffins to fill another box.

Explain how you know.

How does writing $\frac{26}{4}$ help you to answer this?

5 Write $<$, $>$ or $=$ to complete the statements.

a) 2 wholes and 3 quarters \bigcirc 5 quarters

b) 2 wholes and 3 quarters \bigcirc 15 quarters

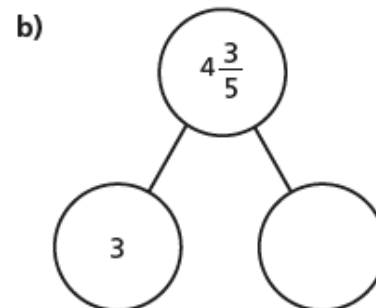
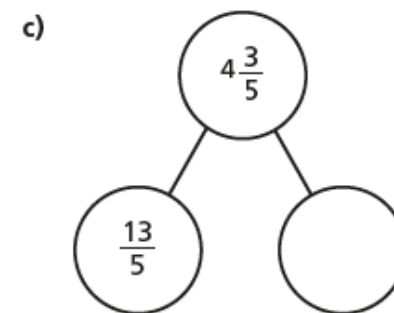
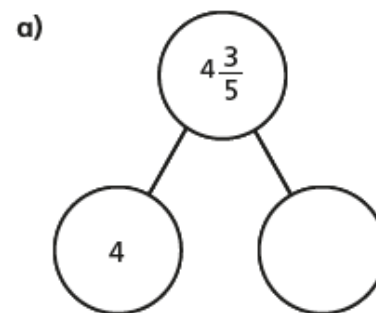
c) 2 wholes and 3 sixths \bigcirc 15 sixths

d) 2 wholes and 3 eighths \bigcirc 15 eighths

e) $\frac{15}{3} \bigcirc \frac{15}{5}$

f) $\frac{15}{3} \bigcirc \frac{20}{4}$

6 Complete the part-whole models.

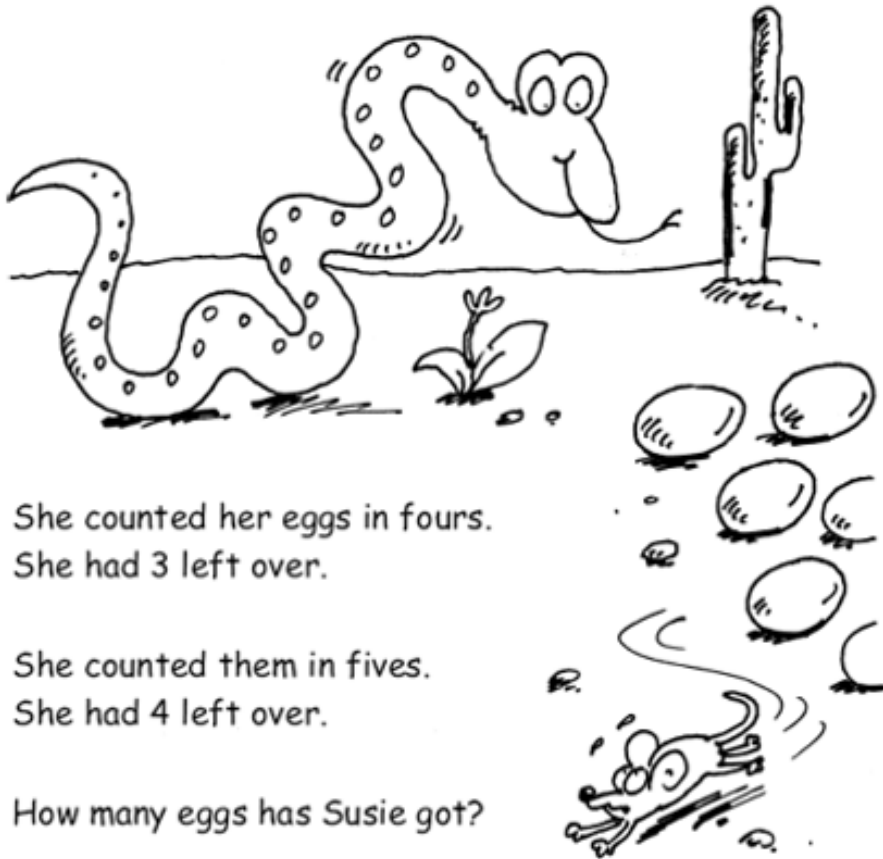


Problem Solving Challenges

Problem One

Susie the snake

Susie the snake has up to 20 eggs.



She counted her eggs in fours.
She had 3 left over.

She counted them in fives.
She had 4 left over.

How many eggs has Susie got?

Problem Two

Treasure hunt



Jed and Jake are pirates.

Between them they have three precious jewels:
a ruby (R), a diamond (D) and an emerald (E).



Complete the table.

Show what jewels each pirate could have.

Jed	Ⓡ						
Jake	Ⓢ ⓓ						