

Year 4 Maths, 2/1/21

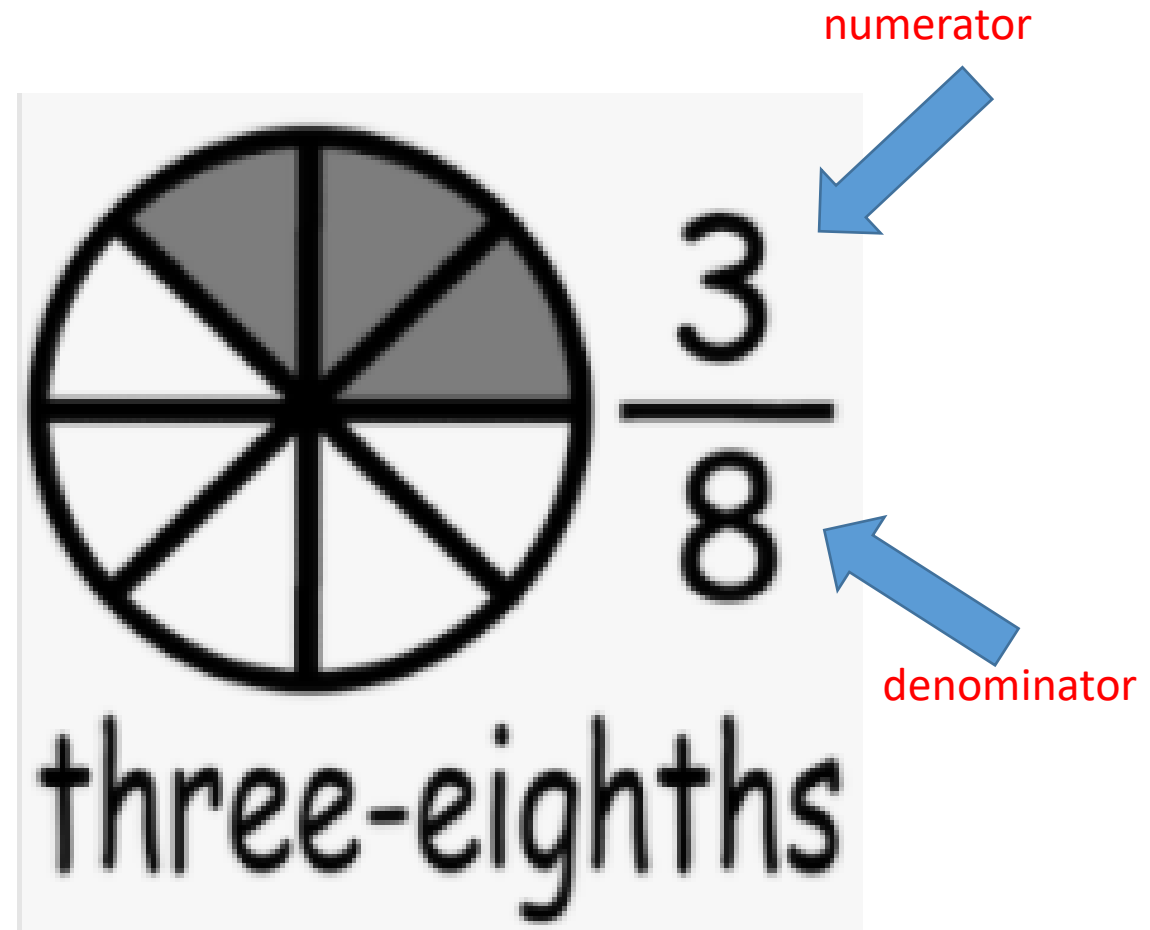
# Recall

- What are the top and bottom parts of a fraction called?
- What do they tell us?



# Recall answers

- What are the top and bottom parts of a fraction called?
- The top number is the numerator.
- The bottom number is the denominator.
  
- What do they tell us?
- The numerator represents the number of parts out of the whole.
- The denominator tells us how many parts the whole has been split into.



# I can recognise and calculate fractions greater than 1

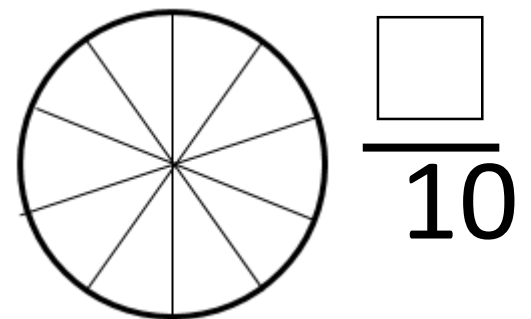
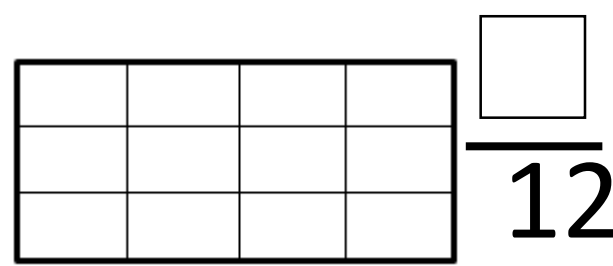
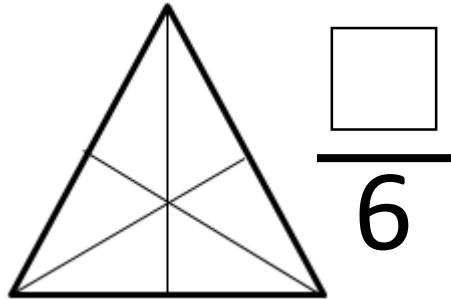
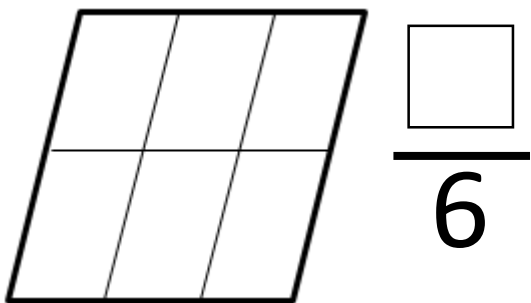
- SOME WILL EVEN give answers as improper fractions and mixed numbers.
- SOME will calculate with improper fractions.
- MOST will recognise fractions greater than one whole (improper fractions).
- ALL will recognise fractions equal to one whole.

# Guided practice

- Let's look at three eighths again.
- How many more eighths would we need to make the shape the same as one whole?
- What fraction would it be if all the sections were shaded?



In each of these shapes, what fraction would be the same as one whole?



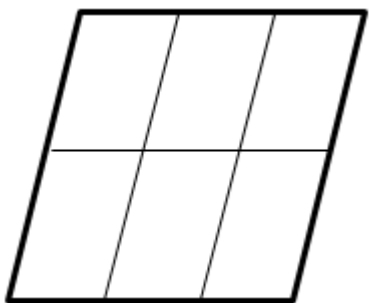
# Guided practice

- How many more eighths would we need to make the shape the same as one whole?
- **Eight eighths is the same as the whole circle, so five more need to be shaded.**
- What fraction would it be if all the sections were shaded?

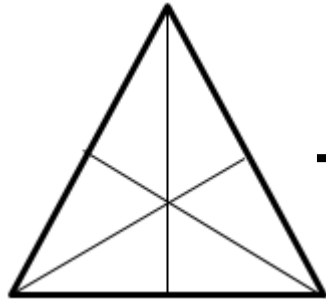
$$\frac{8}{8}$$



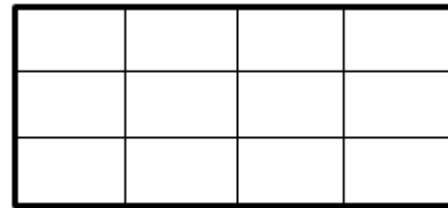
In each of these shapes, what fraction would be the same as one whole?



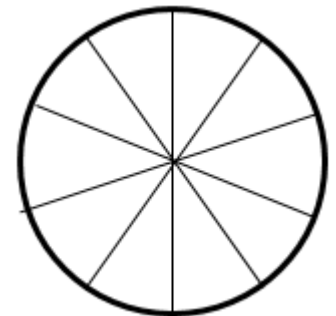
$$\frac{6}{6}$$



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



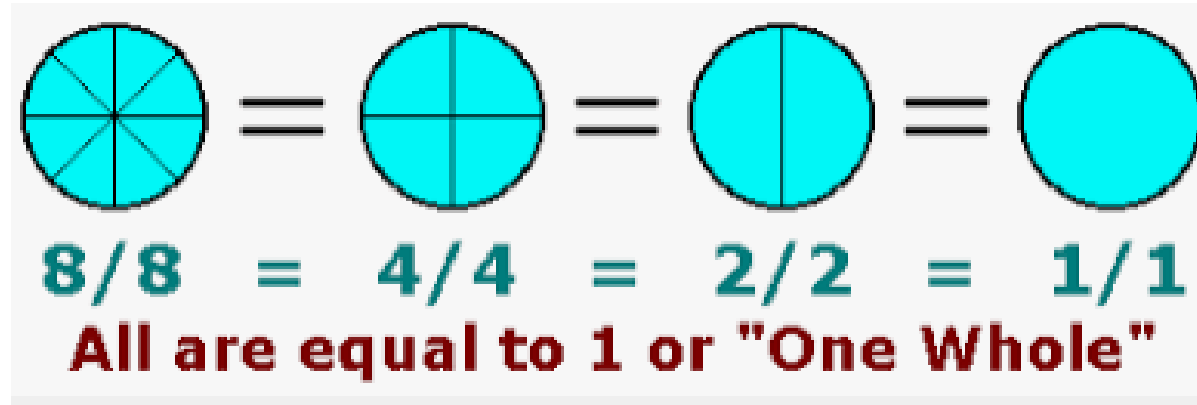
$$\frac{12}{12}$$



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

# Guided practice (continued)

- Did you notice that when a fraction is equal to one, its numerator and denominator are the same?



Here, each rectangle is split into four equal parts.



Because there are more than four quarters, we need more than one rectangle.



Can you describe this as a fraction?

# Guided practice (continued)

Here, each rectangle is split into four equal parts.



Can you describe this as a fraction?

Because there are more than four quarters, we need more than one rectangle.



I can see six quarters.

$$\frac{6}{4}$$

I can also see one whole rectangle and another two quarters.

$$1 \frac{2}{4}$$



# One chilli

- Complete these fractions to make them equal to one.

$$\frac{\square}{5} = 1$$

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

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

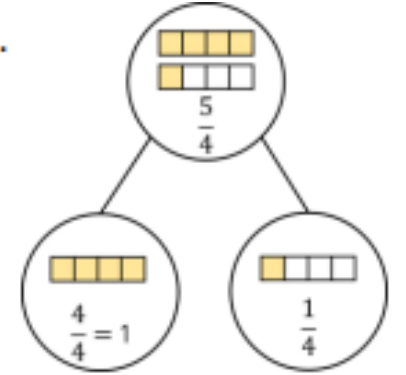
$$\frac{12}{\square} = 1$$

# Two chillies

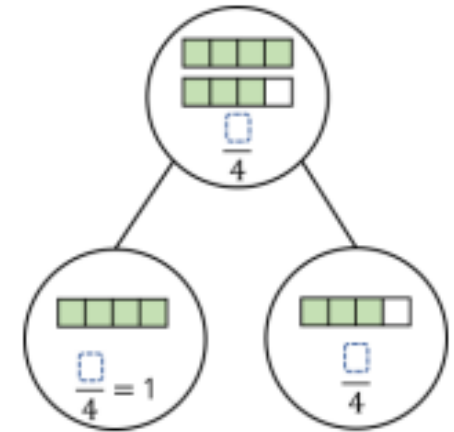
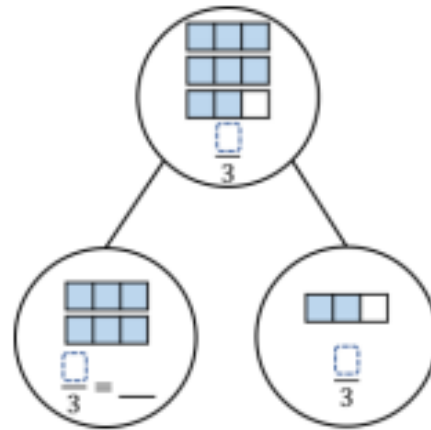
Complete the part-whole models and sentences.

There are \_\_\_ quarters altogether.

\_\_\_ quarters = \_\_\_ whole and \_\_\_ quarter.



Write sentences to describe these part-whole models.



# One chilli answers

- Complete these fractions to make them equal to one.

$$\frac{\boxed{5}}{5} = 1$$

$$\frac{\boxed{7}}{7} = 1$$

$$\frac{9}{\boxed{9}} = 1$$

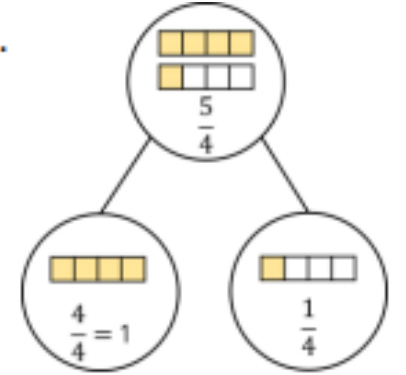
$$\frac{12}{\boxed{12}} = 1$$

# Two chillies answers

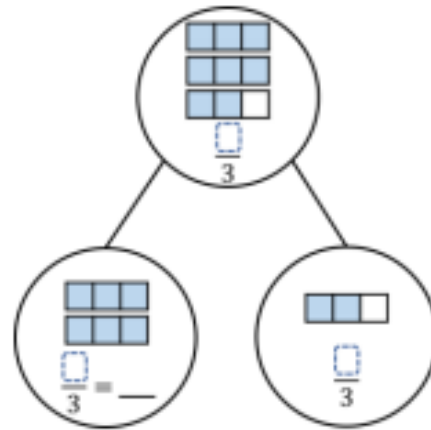
Complete the part-whole models and sentences.

There are 6 quarters altogether.

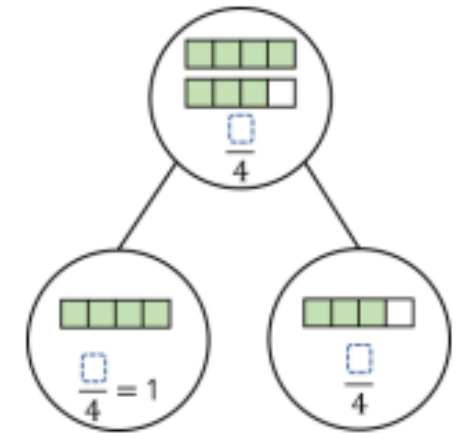
6 quarters = 1 whole and 1 quarter.



Write sentences to describe these part-whole models.



There are 8 thirds altogether.  
8 thirds = 2 wholes and 2 thirds.



There are 7 quarters altogether.  
7 quarters = 1 whole and 3 quarters.

# Three chillies

Complete. You may use part-whole models to help you.

$$\frac{10}{3} = \frac{9}{3} + \frac{\square}{3} = 3\frac{\square}{3}$$

$$\frac{\square}{3} = \frac{6}{3} + \frac{2}{3} = \square\frac{2}{3}$$

$$\frac{\square}{8} = \frac{16}{8} + \frac{3}{8} = \square\frac{\square}{8}$$

# Three chillies answers

Complete. You may use part-whole models to help you.

$$\frac{10}{3} = \frac{9}{3} + \frac{1}{3} = 3\frac{1}{3}$$

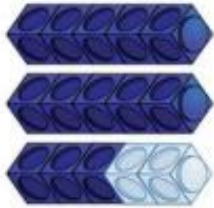
$$\frac{8}{3} = \frac{6}{3} + \frac{2}{3} = 2\frac{2}{3}$$

$$\frac{19}{8} = \frac{16}{8} + \frac{3}{8} = 2\frac{3}{8}$$

# Dive deeper

3 friends share some pizzas.  
Each pizza is cut into 8 equal slices.  
Altogether, they eat 25 slices.  
How many whole pizzas do they eat?

Spot the mistake.



$$\frac{13}{5} = 10 \text{ wholes and } 3 \text{ fifths}$$

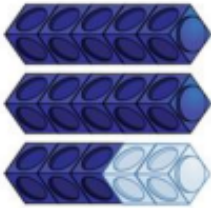
Rosie says,




$\frac{16}{4}$  is greater than  $\frac{8}{2}$   
because 16 is greater than 8

Do you agree?  
Explain why.

# Dive deeper **answers**

<p>3 friends share some pizzas. Each pizza is cut into 8 equal slices. Altogether, they eat 25 slices. How many whole pizzas do they eat?</p>	<p>They eat 3 whole pizzas and 1 more slice.</p>
<p>Spot the mistake.</p>  <p><math>\frac{13}{5} = 10</math> wholes and 3 fifths</p>	<p>There are 2 wholes not 10</p> $\frac{10}{5} = 2 \text{ wholes}$ <p><math>\frac{13}{5} = 2</math> wholes and 3 fifths</p>

Rosie says,



$\frac{16}{4}$  is greater than  $\frac{8}{2}$   
because 16 is greater than 8

Do you agree?  
Explain why.

I disagree with Rosie because both fractions are equivalent to 4

Children may choose to build both fractions using cubes, or draw bar models.

# Self assessment – how did you do?

I can recognise and calculate fractions greater than 1

Can you explain when a fraction is the same as one, or greater than one?

- SOME WILL EVEN give answers as improper fractions and mixed numbers.
- SOME will calculate with improper fractions.
- MOST will recognise fractions greater than one whole (improper fractions).
- ALL will recognise fractions equal to one whole.

Did you get the three chilli questions right? Can you explain how you did them?

Did you get the two chilli questions right?

Did you get the one chilli questions right?