



# Fractions challenges

Q1a)

Complete the sentences to describe the images.

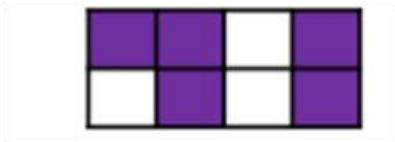


\_\_\_ out of \_\_\_ equal parts are shaded.

$\frac{\square}{\square}$  of the shape is shaded.

Q1b)

Complete the sentences to describe the images.



\_\_\_ out of \_\_\_ equal parts are shaded.

$\frac{\square}{\square}$  of the shape is shaded.

Remember:

Numerator=  
(shaded/chosen  
amount)

Denominator= (total  
of parts)

Q2.

Sort the fractions into the table.

Unit fraction=where the numerator is equal to 1

Non-unit fraction=where the numerator is greater than 1

	Fractions equal to one whole	Fractions less than one whole
Unit fractions		
Non-unit fractions		

Fractions are equal to a whole when the **numerator** and the **denominator** are the **same**.

Are there any boxes in the table empty?  
Why?

$\frac{3}{4}$	$\frac{3}{5}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{2}{2}$	$\frac{4}{4}$	$\frac{2}{5}$	$\frac{1}{2}$
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### Q3. True or False?

Five tenths is  $\frac{2}{10}$  smaller than 7 tenths.

Five tenths is  $\frac{2}{10}$  larger than three tenths.

Do you agree?

Explain why.

To answer this one, I would draw out a numberline with tenths on. Think carefully about how many parts the numberline will be split up into.

Then go through each statement and use the numberline to show your workings out and thinking.

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Q4.

Shade the blank diagrams so the fractions are ordered correctly.

Numbers are in order from smallest to largest.

Fractions in ascending order



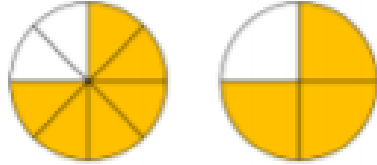
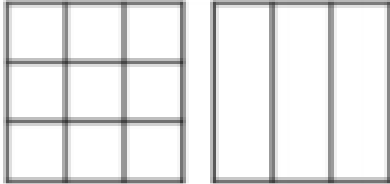

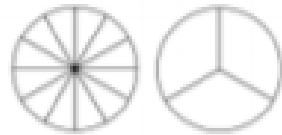
Fractions in descending order

Numbers are in order from largest to smallest.



Write the fraction for each shape to help you.

Q5. Complete the table. Can you spot any patterns?

Pictorial representation	Fraction	Words
	$\frac{6}{8} = \frac{3}{4}$	Six eighths is equivalent to three quarters
	$\frac{1}{3} = \frac{\square}{9}$	_____ is equivalent to _____
	$\frac{\square}{4} = \frac{\square}{12}$	Three twelfths is equivalent to _____ quarters
	$\frac{4}{12} = \frac{\square}{\square}$	_____ is equivalent to _____

Remember for a fraction to be equivalent, it needs to take up the same amount of space.

Colour the shapes to help you.