

RECALL – FRACTION WALL

Use the fraction wall to complete the equivalent fractions for one half.



half
quarters
sixths
eighths
tenths

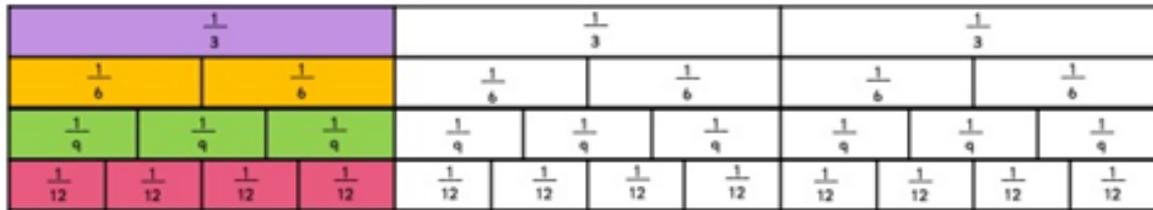
$$\frac{1}{2} = \frac{\square}{4}$$

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

$$\frac{1}{2} = \frac{\square}{8}$$

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

Use the fraction wall to complete the equivalent fractions for one third.



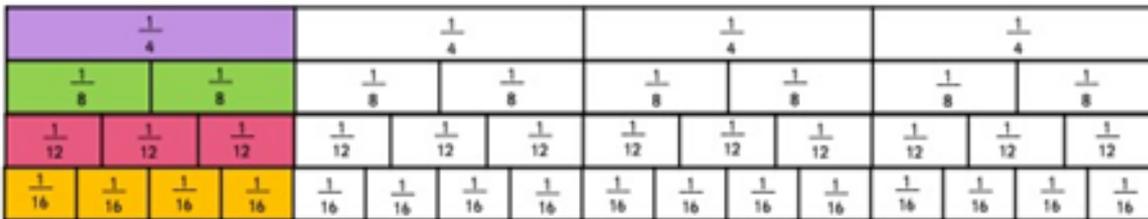
thirds
sixths
ninth
twelfths

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

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

$$\frac{1}{3} = \frac{\square}{12}$$

Use the fraction wall to complete the equivalent fractions for one quarter.



quarters
eighths
twelfths
sixteenths

$$\frac{1}{4} = \frac{\square}{8}$$

$$\frac{1}{4} = \frac{\square}{12}$$

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

3 BEFORE ME



For each wall, look at the numerator and denominator. What times table patterns do you notice?



LO: I RECOGNISE AND SHOW EQUIVALENT FRACTIONS.

Page

Success Criteria

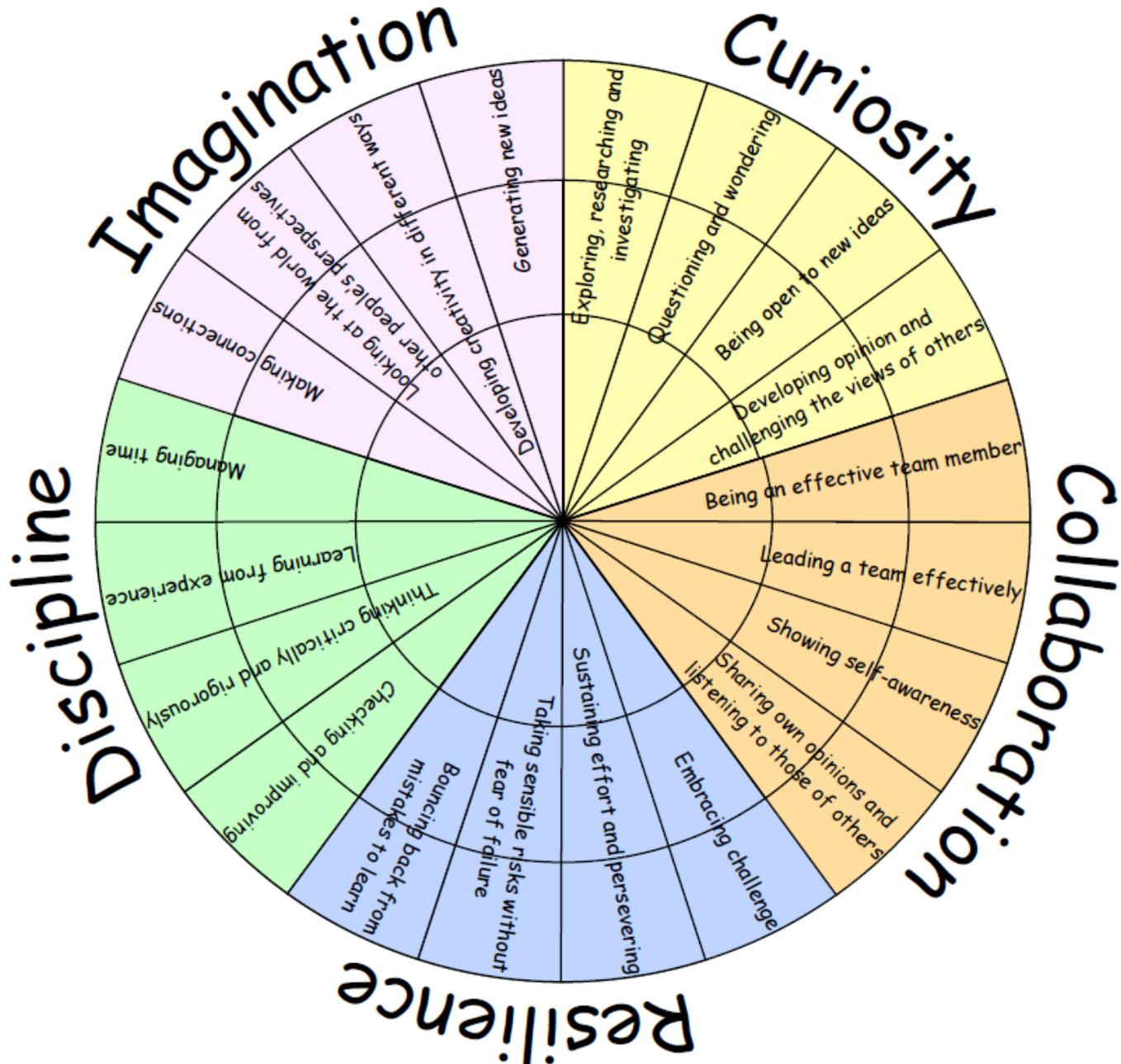
Some will even recognise the relationship/pattern between the numbers between equivalent fractions.

Some will find equivalent fractions where the numerators are both more than 1. (3 fifths is the same as 6 tenths)

Most will recognise equivalent fractions where one numerator is 1 (1 fifth is the same as ...).

All will find simple equivalent fractions (adult support).

LEARNING HABITS?



GUIDED PRACTICE

Reena has four cards and is trying to make equivalent fractions to show one half. $\frac{1}{2}$

How can Reena use her remaining cards to complete the puzzle?



Danny uses four of his cards to make other equivalent fractions.

How could he solve the puzzle?

3 BEFORE ME

Use a fraction wall to help you visualise.



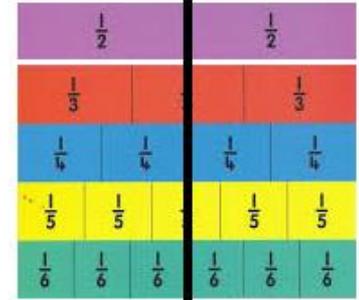
Reena has placed the number cards (1) and (2) on her board to make the fraction $\frac{1}{2}$ (half). She has the number cards (3), (4), (5) and (6) left to use to make an equivalent fraction. I will look on a fraction wall.

Thirds and fifths **do not** sit in the same place as half.

Quarters and sixths sit in the same place as a half.

Two quarters is the same as half **BUT** she already used the number card (2).

Three sixths is the same as a half. Reena can complete the puzzle using the number cards (3) and (6).



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

Danny could complete his puzzle in more than one way. He notices that using times tables make it easier.

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

x3

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

x2

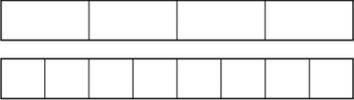
$$\frac{2}{3} = \frac{4}{6}$$

x2

If you times the numerator and denominator by the same number, you get an equivalent fraction.

INTELLIGENT PRACTICE

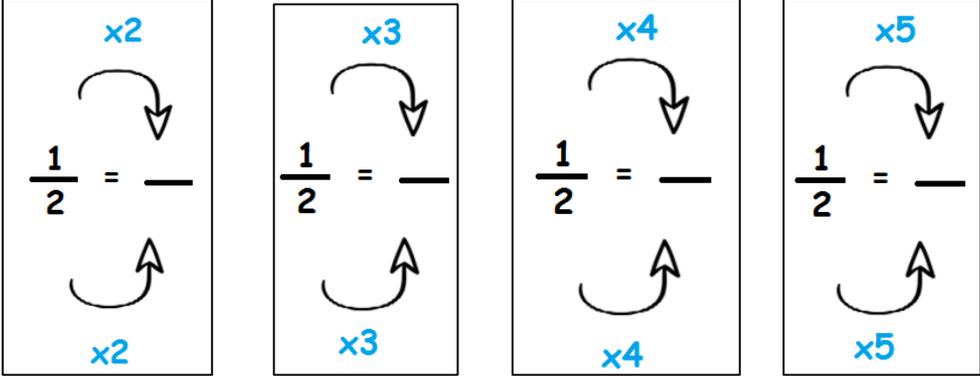
Find the missing fractions



$\frac{1}{4}$ is equivalent to $\frac{\quad}{8}$

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

$\frac{3}{4}$ is equivalent to $\frac{\quad}{8}$



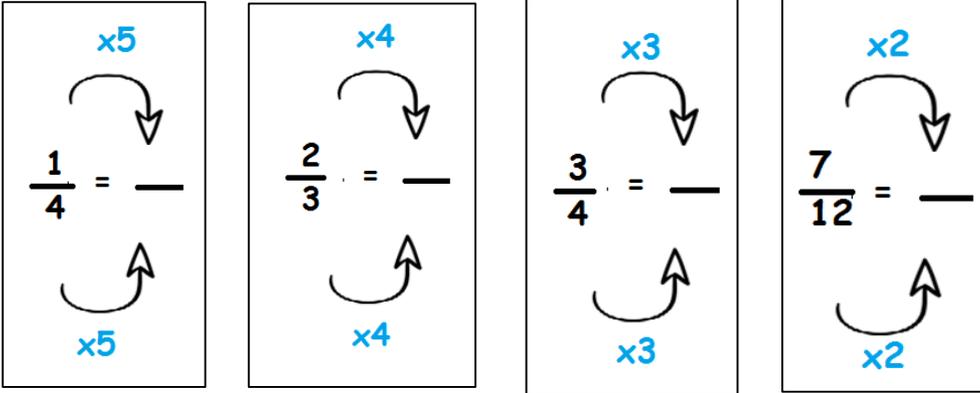
Using the words 'numerator' and 'denominator' - explain how you solved these equivalent fractions.



$\frac{2}{5}$ is equivalent to $\frac{\quad}{10}$

$\frac{3}{5}$ is equivalent to $\frac{\quad}{10}$

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



Using the words 'numerator' and 'denominator' - explain how you solved these equivalent fractions.

3 BEFORE ME
Equivalent means the same.



DIVE DEEPER 1

1 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 _____.

2 Complete the statements.

$\frac{1}{2} = \frac{\square}{6} = \frac{\square}{12}$ $\frac{\square}{2} = \frac{2}{4} = \frac{\square}{8}$ $\frac{1}{4} = \frac{\square}{8} = \frac{\square}{16}$

3 The numerator is 2.
 If I multiply by ___ I get ____.
 The denominator is 3.
 If I multiply it by ___ again, I get ____.

$\frac{2}{3} = \frac{8}{12}$

4 Explain why two fifths is not equal to four fifteenths.

$$\frac{2}{5} = \frac{4}{15}$$

.....

5 Complete the missing numbers.

a) $\frac{6}{10} = \frac{\square}{20}$ d) $\frac{\square}{8} = \frac{1}{2}$

b) $\frac{3}{4} = \frac{\square}{16}$ e) $\frac{5}{11} = \frac{30}{\square}$

c) $\frac{8}{12} = \frac{\square}{6}$ f) $\frac{5}{\square} = \frac{1}{3}$

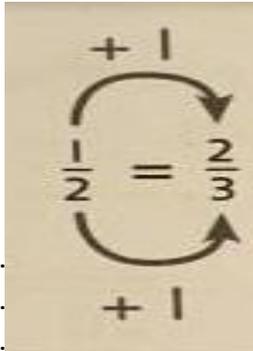
In your maths book, explain what you have to multiply each numerator and denominator by.

DIVE DEEPER 2

1

Emma thinks that one half is equal to two thirds. This is how she worked out her answer.

What is wrong with her method?
What did she do wrong?



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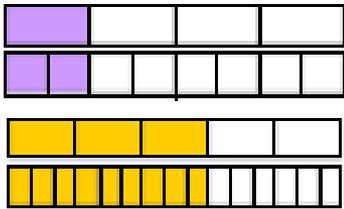
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.....

2

Always, Sometimes or Never?



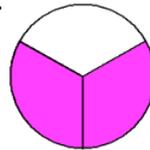
To find an equivalent fraction you can just double the numerator and the denominator.

3

Here is a diagram with some equal parts shaded.



There is an equivalent fraction where the numerator is 5.



Is it possible?
Explain why in your math book.

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

4

Complete the calculation in your book.



$$\frac{3}{4} = \frac{\text{circle}}{\text{triangle}}$$

The  is a number between 35 and 45.
What pairs of numbers could  and  be?

5

You can use multiplication to solve equivalent fractions.



You have to multiply the numerator and denominator by the same number.



In maths, addition is the inverse of subtraction and multiplication is the inverse of division.



Explain why four tenths is equivalent to two fifths.

$$\frac{4}{10} = \frac{2}{5}$$