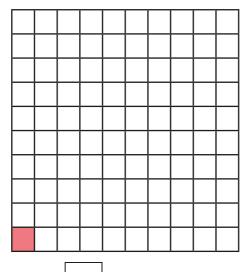
## Fractions to decimals (1)



1 Complete the sentences.

a)

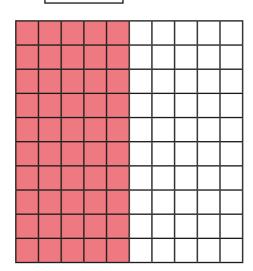


Each square represents  $\frac{}{100}$ 

 $\frac{}{100}$  of the whole square is shaded.

This is equivalent to as a decimal.

b)

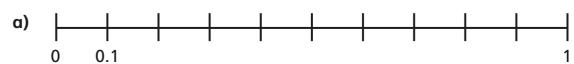


 $\frac{}{100}$  of the whole square is shaded.

This can be simplified to

This is equivalent to as a decimal.



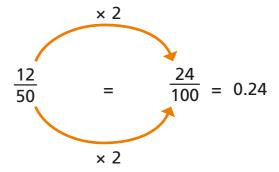




What is the same and what is different about the number lines?



To convert a fraction to a decimal, you can use equivalent fractions to make the denominator 100



Use this method to find the equivalent decimals for the fractions.

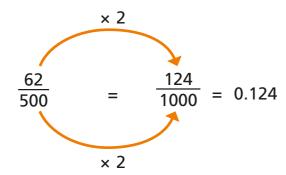
a) 
$$\frac{28}{50} = \frac{}{100} =$$

c) 
$$\frac{9}{25} = \frac{100}{100} = \frac{1}{100}$$

**b)** 
$$\frac{6}{20} = \frac{100}{100} = \frac{1}{100}$$

d) 
$$\frac{24}{200} = \frac{100}{100} = \frac{1}{100}$$

Some fractions can be converted to have a denominator of 1,000 to find their decimal equivalent.



- a)  $\frac{27}{500} = \frac{1000}{1000} = \frac{1000}{1000}$
- **b)**  $\frac{62}{250} = \frac{1000}{1000} = \frac{1}{1000}$
- c)  $\frac{51}{200} = \frac{1000}{1000} = \frac{1}{1000}$
- d)  $\frac{128}{2,000} = \frac{1000}{1000} = \frac{1}{1000}$
- Convert the fractions to their decimal equivalents.
  - a)  $\frac{1}{5} =$

**b)**  $\frac{1}{20} =$ 

1 10 =

2/20 =

 $\frac{1}{20} =$ 

 $\frac{3}{20} =$ 

 $\frac{1}{40} =$ 

 $\frac{6}{20} =$ 

Tommy, Alex and Eva are working out the decimal equivalent of  $\frac{60}{200}$ 



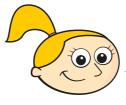
You need to convert it to have a denominator of 100 to find the decimal equivalent.

Tommy

I disagree. You need to convert it to have a denominator of 1,000



Alex



Both of you are right!

Eva

Who do you agree with? \_\_\_\_\_

Explain your thinking.

7 0.5 is equivalent to  $\frac{1}{2}$ ,  $\frac{5}{10}$ ,  $\frac{50}{100}$ 

Are these the only fractions that are equivalent to 0.5? How many fractions can you find?



Compare answers with a partner.

