





Steps to Success

Lockdown

Date	6.01.21
Subject/s	Maths
Learning Objective 	To convert between fractions and decimals

		SA 	TA 
Success Criteria 	I know the "fraction line" represents divide by		
	I can use my knowledge of dividing by 10, 100 and 1000 to convert between fractions and decimals		
	I can change to equivalent fractions with a denominators of 10, 100 and 1000		
	I can use my knowledge of bus stop method		
Support	Independent Adult Support () Group Work		

Pre-task

What is..

0.65 as a fraction

2/100 as a decimal

3/25 as a decimal

5/8 as a decimal

Fluency

Numbers less than a whole can be written two ways: as a fraction or a decimal.

1. a fraction

$$0.25 = \frac{25}{100}$$

Since the 5 is written in the 100ths place, write a 100 on the bottom.

2. a decimal

$$\frac{2}{10} = 0.2$$

Since the 2 is above the number 10, write the 2 in the 10ths place.

Rewrite the numbers below as a fraction or a decimal.

A. $\frac{51}{100} =$ _____ $\frac{5}{10} =$ _____ $\frac{63}{100} =$ _____ $\frac{92}{100} =$ _____

B. $0.25 =$ _____ $0.4 =$ _____ $0.40 =$ _____ $0.85 =$ _____

C. $\frac{25}{10} =$ _____ $0.15 =$ _____ $0.94 =$ _____ $\frac{55}{100} =$ _____

D. $\frac{73}{100} =$ _____ $\frac{82}{100} =$ _____ $\frac{7}{10} =$ _____ $0.3 =$ _____

E. $0.6 =$ _____ $0.45 =$ _____ $0.95 =$ _____ $\frac{64}{100} =$ _____

F. $\frac{22}{100} =$ _____ $0.79 =$ _____ $\frac{43}{10} =$ _____ $0.5 =$ _____

G. $\frac{1}{10} =$ _____ $\frac{4}{10} =$ _____ $0.1 =$ _____ $\frac{32}{100} =$ _____

H. $\frac{99}{100} =$ _____ $0.2 =$ _____ $\frac{2}{10} =$ _____ $\frac{74}{100} =$ _____

I. $\frac{9}{10} =$ _____ $\frac{8}{10} =$ _____ $0.66 =$ _____ $\frac{28}{100} =$ _____

1. $\frac{4}{20} =$ _____

2. $\frac{3}{5} =$ _____

3. $\frac{9}{10} =$ _____

4. $\frac{1}{4} =$ _____

5. $\frac{4}{5} =$ _____

6. $\frac{1}{2} =$ _____

7. $\frac{18}{25} =$ _____

8. $\frac{16}{20} =$ _____

9. $\frac{1}{10} =$ _____

10. $\frac{16}{50} =$ _____

11. $\frac{76}{100} =$ _____

12. $\frac{3}{4} =$ _____

13. $\frac{1}{5} =$ _____

14. $\frac{10}{20} =$ _____

15. $\frac{18}{50} =$ _____

16. $\frac{17}{25} =$ _____

17. $\frac{6}{10} =$ _____

18. $\frac{9}{100} =$ _____

Problem Solving and Reasoning

Use it!

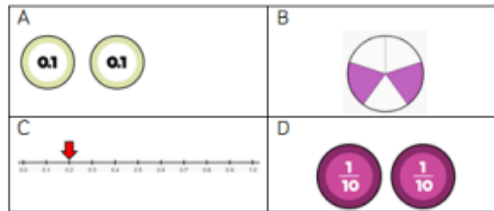


Odd one out.

Explain it!



Which of the images below is the odd one out?



Explain why.

Convince me!



Explain it!



Sam says,

To convert a fraction to a decimal, take the numerator and put it after the decimal point.

$$\text{E.g. } \frac{21}{100} = 0.21$$



Write two examples of converting fractions to decimals to prove this does not always work.

Explain it!



Alex says,



0.84 is equivalent to $\frac{84}{10}$

Do you agree?
Explain why.

Use it!



Match the fractions to the equivalent decimals.

$$\frac{4}{10}$$

0.09

$$\frac{37}{100}$$

0.4

$$\frac{9}{100}$$

0.37

Further Challenge

Find the decimal equivalents of

$$\frac{1}{9}, \frac{1}{99}, \frac{1}{999}, \frac{1}{9999}, \dots$$

Explain the pattern you get and generalise.

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