

Thursday 7th

January

Maths

Fluency

Convert these fractions into decimals:

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

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

3) $\frac{3}{8} =$

4) $\frac{4}{5} =$

5) $\frac{7}{4} =$

6) $\frac{7}{16} =$

7) $\frac{1}{6} =$

8) $\frac{11}{2} =$

9) $\frac{18}{8} =$

10) $\frac{6}{15} =$

11) $\frac{7}{3} =$

12) $\frac{6}{20} =$

13) $\frac{9}{15} =$

14) $\frac{16}{6} =$

15) $\frac{7}{9} =$

16) $\frac{9}{5} =$






Answers

1) $\frac{1}{5} = 0.2$ 2) $\frac{3}{12} = 0.25$ 3) $\frac{3}{8} = 0.375$ 4) $\frac{4}{5} = 0.8$

5) $\frac{7}{4} = 1.75$ 6) $\frac{7}{16} = 0.4375$ 7) $\frac{1}{6} = 0.16\bar{6}$ 8) $\frac{11}{2} = 5.5$

9) $\frac{18}{8} = 2.25$ 10) $\frac{6}{15} = 0.4$ 11) $\frac{7}{3} = 2.33$ 12) $\frac{6}{20} = 0.3$

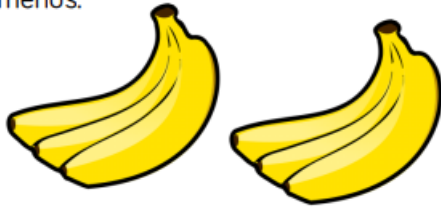
13) $\frac{9}{15} = 0.6$ 14) $\frac{16}{6} = 2.66$ 15) $\frac{7}{9} = 0.77$ 16) $\frac{9}{5} = 1.8$

Problem Solving and Reasoning	Answers
<p>Explain it!</p>  <p>True or False?</p> <div style="border: 2px solid green; border-radius: 15px; padding: 10px; display: inline-block; margin: 10px 0;"> <p>0.3 is bigger than $\frac{1}{4}$</p> </div> <p>Explain your reasoning.</p>	<p>0.3 is bigger than one quarter because one quarter is equivalent to 0.25</p>
<p>Explain it!</p>  <p>Josh says,</p> <div style="display: flex; align-items: center; margin: 10px 0;">  <div style="border: 1px solid blue; border-radius: 50%; padding: 5px; background-color: #e0f0ff;"> <p>The decimal 0.42 can be read as 'four tenths and two hundredths'.</p> </div> </div> <p>Bix says,</p> <div style="display: flex; align-items: center; margin: 10px 0;">  <div style="border: 1px solid blue; border-radius: 50%; padding: 5px; background-color: #e0f0ff;"> <p>The decimal 0.42 can be read as 'forty-two hundredths'.</p> </div> </div> <p>Who do you agree with? Explain your answer.</p>	<p>Both are correct. Four tenths are equivalent to forty hundredths, plus the two hundredths equals forty-two hundredths.</p>
<p>Explain it!</p>  <p>Hannah and Alex are converting $\frac{30}{500}$ into a decimal.</p> <ul style="list-style-type: none"> • Hannah doubles the numerator and denominator, then divides by 10 • Alex divides both the numerator and the denominator by 5 • Both get the answer $\frac{6}{100} = 0.06$ <p>Which method would you use to work out each of the following?</p> <div style="border: 2px solid pink; border-radius: 15px; padding: 5px; display: inline-block; margin: 10px 0;"> <p>$\frac{25}{500}$ $\frac{125}{500}$ $\frac{40}{500}$ $\frac{350}{500}$</p> </div> <p>Explain why you have used a certain method.</p>	<p>$\frac{25}{500}$ - divide by 5, known division fact.</p> <p>$\frac{125}{500}$ - double, easier than dividing 125 by 5</p> <p>$\frac{40}{500}$ - divide by 5, known division fact.</p> <p>$\frac{350}{500}$ - double, easier than dividing 350 by 5</p>

Convince me!



Pete shares 6 bananas between some friends.



Each friend gets 0.75 of a banana.

How many friends does he share the bananas with?
Show your method.

Pete shares his 6 bananas between 8 friends because 6 divided by 8 equals 0.75

Prove it!



Charlotte and Stephen have both attempted to convert $\frac{2}{8}$ into a decimal.



I converted $\frac{2}{8}$ into 0.25

I converted $\frac{2}{8}$ into 4



Who is correct?
Prove it.

Charlotte is correct and Stephen is incorrect.

Stephen has divided 8 by 2 rather than 2 divided by 8 to find the answer.

Further Challenge



- 1) Give either the decimal or simplified fraction that will make these number statements true.

$$\boxed{} + \frac{4}{20} + 0.05 = 1$$

$$\frac{3}{24} + \frac{300}{500} + \boxed{} = 1$$

- 2) Copy and complete each of the number statements in three different ways. Try to use all the different fraction cards and decimals of your choice.

$\frac{?}{20}$	$\frac{?}{25}$	$\frac{?}{50}$	$\frac{?}{200}$	$\frac{?}{500}$	$\frac{?}{8}$	$\frac{?}{5}$	$\frac{?}{3}$
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a) $\text{---} + \text{---} + 0.\text{---}\text{---}\text{---} = 1$

b) $\text{---} + \text{---} = 0.\text{---}\text{---}\text{---} = \text{an answer between } \frac{2}{5} \text{ and } \frac{4}{5}$

c) $\text{---} + \text{---} = 0.\text{---}\text{---}\text{---} = \text{an answer between } \frac{3}{4} \text{ and } \frac{7}{8}$