To convert fractions to decimals - Questions

1. Use place value counters and short division to show what each of these fractions is as a decimal:

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

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

c. $\frac{7}{8} =$

d. $\frac{2}{3} =$

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2. 5 pizzas are shared equally between a number of children.

Each child gets 0.25 of a pizza.

How many children are there?

Can you find more than one way to find the answer to this question?

Can you write a similar problem for a friend to solve?

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3. Which of these people has converted their fraction correctly? Prove it.

Lily	Alex	Nathan	Oliver
$\frac{2}{6} = 0.33$	$\frac{3}{8} = 3.75$	$\frac{3}{12} = 0.25$	$\frac{6}{8} = 0.72$

To convert fractions to decimals - Answers

Question No.	Question	Answer
1	Use place value counters and short division to show what each of these fractions is as a decimal: a. ¼ = b. ⅘ = c. ⅞ = d. ⅔ =	a. ¼ = 0.25 b. ⅘ = 0.80 c. ⅞ = 0.875 d. ⅔ = 0.66 Pupils should use equipment that is available to them to support them completing the division. They should also show a written short division to show the answer.
2	5 pizzas are shared equally between a number of children. Each child gets 0.25 of a pizza. How many children are there? Can you find more than one way to find the answer to this question? Can you write a similar problem for a friend to solve?	Method 1: Recognise that $5 \div ? = 0.25$. Write out the short division method and think about what number you can divide by to give the remainders and answers you need. Method 2: Understand that $0.25 = ¼$. So 5 must be a quarter of the number of children. Method 3: Count in 0.25s until you get to 5. How many are there? There are 20 children. Children will have different ideas.
3	Which of these people has converted their fraction correctly? Prove it. Lily ⅖ = 0.33 Alex ⅜ = 3.75 Nathan ³⁄₁₂ = 0.25 Oliver ⅝ = 0.72	Lily and Nathan are correct. Alex and Oliver are not correct. Pupils should show this using short division.