

Wednesday 8th July

We have another magic trick for you to test out today, then amaze your family!

First, warm yourself up with these questions...

$$A. 87 \div 100 =$$

$$B. 5 \times 6 \times 5 =$$

$$C. 86.49 - 17.9 =$$

$$D. \frac{1}{5} + \frac{4}{15} =$$

$$E. 3,842 \div 5 =$$

Q1 Two decimal numbers add together to make 2.5.

One number is 1.04.

What is the other number?

1 mark

Q2 Three prime numbers multiply together to make 385.

Complete the missing numbers.

$$\square \times \square \times \square = 385$$

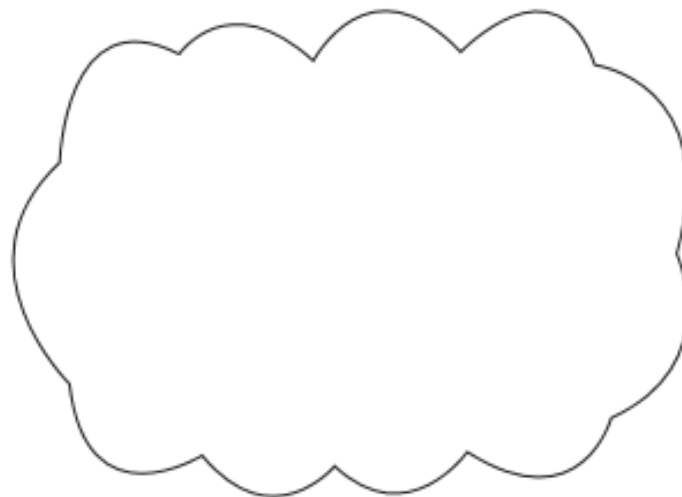
1 mark

Q3 Lily says, “to convert any fraction to a decimal, you just divide the numerator by 10.”

For example, $\frac{3}{10} = 0.3$ as $3 \div 10 = 0.3$.

Lily is not correct.

Explain why Lily is not correct.



1 mark

Is it a trick?????

Choose 4 different digits and make the largest possible number with them.

Now make the smallest possible number.

Subtract the smaller number from the bigger number.

Take your answer and repeat the process, as in the example below:

8421...1248...7173
7731...1377...6354
6543...3456...3087
8730...0378...8352
8532...2358...6174



Try some other numbers - do you always reach 6174?

Try it on your family - amaze them by predicting the future!!

Answers

$$\text{A. } 87 \div 100 = 0.87 \text{ (M)}$$

$$\text{B. } 5 \times 6 \times 5 = 150 \text{ (M)}$$

$$\text{C. } 86.49 - 17.9 = 68.59$$

(W)

$$\text{D. } \frac{1}{5} + \frac{4}{15} = \frac{7}{15} \text{ (M)}$$

$$\text{E. } 3,842 \div 5 = 768 \text{ r } 2 \text{ or } 768 \frac{2}{5}$$

or 768.4 (W)

Q1 Two decimal numbers add together to make 2.5.

One number is 1.04.

What is the other number?

1.46

1 mark

Q2 Three prime numbers multiply together to make 385.

Complete the missing numbers.

$$\boxed{11} \times \boxed{5} \times \boxed{7} = 385$$

1 mark

Q3 Lily says, “to convert any fraction to a decimal, you just divide the numerator by 10.”

For example, $\frac{3}{10} = 0.3$ as $3 \div 10 = 0.3$.

Lily is not correct.

Explain why Lily is not correct.

Dividing by 10 only works when the denominator is 10. It doesn't work for other fractions, like $\frac{1}{4} = 0.25$, not 0.1

$\frac{1}{5} = 0.2$ if Lily was correct $\frac{1}{5} = 0.1$.

1 mark