## Day 2 - Dividing decimals by integers

Video Link: https://vimeo.com/490691239
The most important thing about dividing decimals is to remember to include your decimal point in the answer.
Set up the bus stop exactly how you would a normal division. Put your decimal point in place first. This way you can't forget it.

Firstly, try to divide the number in the tens column (9) by 7
 So solve this calculation just like normal: How many 7s in 9 (1 carry 2) How many 7s in 23 (3 carry 2)
The decimal point is already in place. How many 7s in 28 (4 no carry)
$93.8 / 7=13.4$

Day 2 Starter
I) What is $0.6 \times 7$ ?
2) What is $1.8 \div 10$ ?

3) Work out $1 \frac{5}{6}-\frac{5}{9}$
4) Work out 2,791 metres - 1,344 metres

## Day 2 Starter

I) What is $0.6 \times 7$ ? $\quad 4.2$
2) What is $1.8 \div 10$ ?
0.18

3) Work out $1 \frac{5}{6}-\frac{5}{9} \quad 1 \frac{5}{18}$
4) Work out 2,79 metres - 1,344 metres 1,447

1. Complete these divisions
a) $£ 31.80 \div 3=$

c) $£ 28.50 \div 5=$

e) $£ 95.40 \div 9=$

g) $£ 14.40 \div 16=$
b) $£ 26.40 \div 4=$

d) $£ 14.40 \div 8=$

f) $£ 52.80 \div 8=$

h) $£ 85.50 \div 15=$
2. Winston knows that $£ 4.60 \times 9=£ 41.40$

He uses this fact to work out the value of $£ 41.40 \div 9$
Find Winston's solution.
Explain your reasoning.
4. Solve these word problems and show your method.
a). Four friends share $£ 6.52$ equally. How much do they each receive?

b) The cost of a stone boarder around a square patio is $£ 22.40$. Work out the cost of one of the equal sides.


1. Complete these divisions
a) $11.9 \div 7=$
b) $26.4 \div 8=$
2. Winston knows that $34 \times 46=1564$.

He uses this fact to work out the value of $156.4 \div 46$ Find Winston's solution. Explain your reasoning.
4. Solve these word problems and show your method.
a). James has 3.65 m of rope into 5 pieces of equal length.

How long is equal piece of rope?

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b) The perimeter of a regular octagon is 40.8 cm Calculate the length of each side.


1. Complete these divisions
a) $8.4 \div 12=$

c) $34.5 \div 15=$
d) $0.322 \div 14=$
e) $2.266 \div 22=$
g) $0.56 \div 16=$
b) $0.143 \div 11=$

2. Winston knows that $34 \times 46=1564$.

He uses this fact to work out the value of $1564 \div 4.6$.
Find Winston's solution.

## Explain your reasoning.

4. Solve these word problems and show your method.
a). Today, a litre of diesel costs $£ 1.36$. This is 17 times more expensive than it cost in 1973. How much did it cost in 1973?

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b) The perimeter of a regular octagon is 40.96 cm Calculate the length of each side.

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## ANSWERS:

| 1* | 2* | 3* |
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| 1a. $£ 10.60$ | 1a. 1.7 | 1a. 0.7 |
| 1b. $£ 6.60$ | 1b. 3.3 | 1b. 0.013 |
| 1c. $£ 5.70$ | 1c. 5.7 | 1c. 2.3 |
| 1d. $£ 1.80$ | 1d. 2.2 | 1d. 0.023 |
| 1e. $£ 10.60$ | 1e. 5.3 | 1e. 0.103 |
| 1f. $£ 6.60$ | 1f. 19.6 | 1f. 0.64 |
| 1g. £0.90 OR 90p | 1 g .0 .9 | 1g. 0.035 |
| 1h. $£ 5.70$ | 1h. 6.3 | 1h. 0.63 |
| 2. $£ 4.60 \times 9=£ 41.40$ so $£ 41.40 \div 9$ $=£ 4.60$ because it is the inverse operation. | 2. $34 \times 46=1,564$ so $156.4 \div 46=$ <br> 3.4 because 1,564 is divided by 10 therefore 34 is divided by 10 . | 2. $34 \times 46=1,564.1,564 \div 4.6=$ 340 because 46 is divided by 10 so I must multiply 34 by 10 . |
| 4a. $£ 1.63$ | 4a. 0.73 m | 4a. £0.08 OR 8p |
| 4b. $£ 5.60$ | 4b. 5.1 cm | 4b. 5.12 cm |

