THIRD SPACE LEARNING

HELLO!

Today we are going to revise short and long division

THIRD SPACE LEARNING

Arithmetic Warm Up

1. $56 \div 8 =$ ☐

2. $456 \div 100 =$ ☐

3. $195 \div 5 =$ ☐

You are revising short and long division (Meeting Y6 expectations)

Revision on short and long division

Now we are going to revise:

- Short division
- Long division
- Know when you would use long or short division

You are revising short and long division (Meeting Y6 expectations)

Revision: Short division with remainders

1 x 4 = 4
2 x 4 = 8
3 x 4 = 12
4 x 4 = 16
5 x 4 = 20
6 x 4 = 24
7 x 4 = 28
8 x 4 = 32
9 x 4 = 36

$$4\overline{)1574}$$

Talk through each part of this short division

Write the remainder as a **fraction** and a **decimal**:

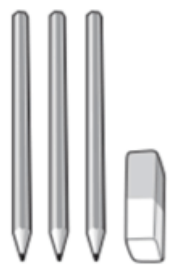
Question 1

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

Complete

6 pencils cost **£1.68**

3 pencils and 1 rubber cost **£1.09**

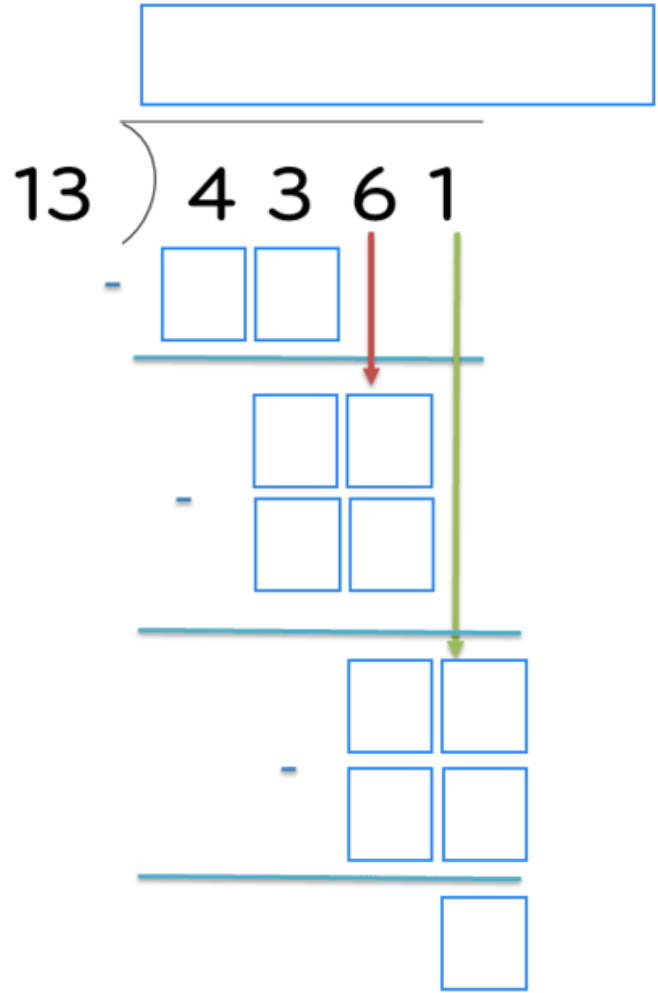


What is the cost of **1 rubber**?

Revision: Long Division

1. Divide
2. Multiply
3. Subtract
4. Bring down

1 x 13 = 13
2 x 13 = 26
3 x 13 = 39
4 x 13 = 52
5 x 13 = 65
6 x 13 = 78



You are revising short and long division (Meeting Y6 expectations)

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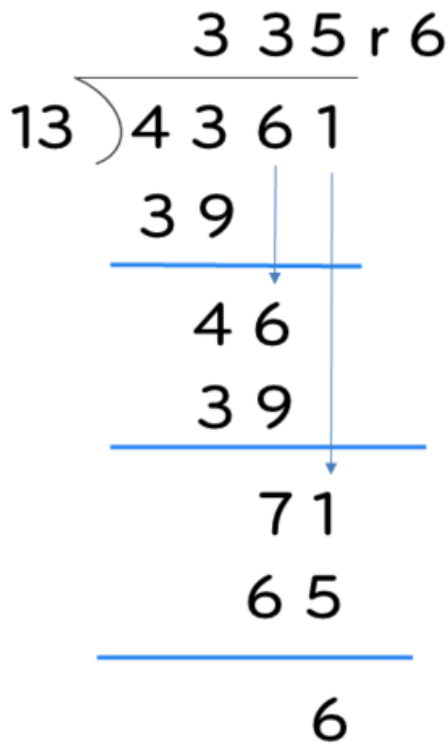
Worked out answer



The remainder can also be written as:

$\frac{6}{13}$

1 x 13 = 13
2 x 13 = 26
3 x 13 = 39
4 x 13 = 52
5 x 13 = 65

Talk through the method for this long division again

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Question 2

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

Use the space provided to complete the following question.

Circle the numbers that represent the remainder after the division 328 ÷ 24

$\frac{1}{2}$ $\frac{2}{3}$ 24 16 $\frac{16}{24}$

THIRD SPACE LEARNING

Let's review:

- I can use the correct method for both short and long division
- I understand when it is best to use long division rather than short division

Draw a circle around the smiley face to show how you feel about what we've just been doing.

CHALLENGE

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

Complete

Olivia buys three packets of nuts.

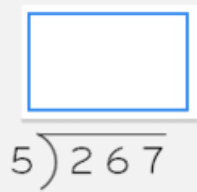
She pays with a **£2 coin**.

This is her change.

What is the cost of **one** packet of nuts?

Short division with remainders

Here is another example.



$5 \times \underline{5} = 25$ ← 5 goes into 25 five times.

26 – 25 = 1, so 1 ten is exchanged for 10 ones and written in the ones column.

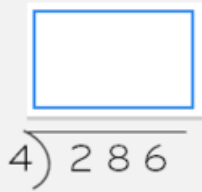
$5 \times \underline{3} = 15$ ← 5 goes into 15 three times, but we have 17.

$17 - 15 = \underline{2}$ ← 2 is the remainder.

So, $267 \div 5 =$ ☐

Short division with remainders

Solve the problem. Write R for the remainder if needed.



4 × ☐ = ☐

4 × ☐ = ☐

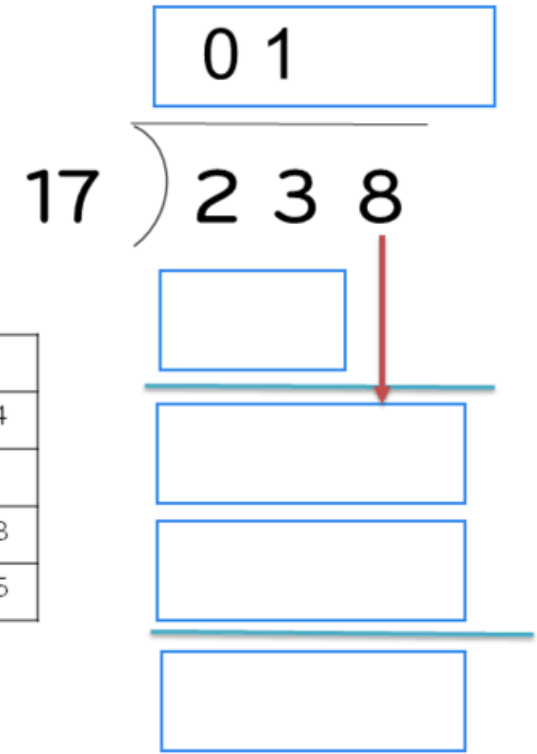
6 − ☐ = ☐

Long division

17 does not go into 2.
17 goes into 23 one time.

The long division method is one way to divide.

Think about 238 ÷ 17.



1. Divide
2. Multiply
3. Subtract
4. Bring down

1 x 17 = 17
2 x 17 = 34
3 x 17 = 51
4 x 17 = 68
5 x 17 = 85