

Y6 Long Division

KS2 Y6 Maths · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

6,831 ÷ 23

Step 1 · $68 \div 23 = 2$; $2 \times 23 = 46$; $68 - 46$

22

Step 2 · Bring down 3: $223 \div 23 = 9$; $9 \times 23 = 207$; $223 - 207$

16

Step 3 · Bring down 1: $161 \div 23 = 7$; $7 \times 23 = 161$; $161 - 161$

0

Answer: 297

Check: $297 \times 23 = 6,831$ ✓

2. Now try one with the steps

3,654 ÷ 27. Give the remainder fraction.

Step 1 · $36 \div 27 = 1$; $36 - 27$

Step 2 · Bring down 5: $95 \div 27 = 3$; $95 - 81$

Step 3 · Bring down 4: $144 \div 27 = 5$; $144 - 135$

Step 4 · Remainder 9 out of 27

Answer:

3. Practice

Have a go at each one. There is space underneath to work it out.

1. $7,248 \div 24$

2. $5,372 \div 34$

3. $4,432 \div 16$

4. $3,978 \div 17$

5. $6,156 \div 38$

6. $2,489 \div 19$

7. $7,524 \div 36$

8. $9,568 \div 23$

9. $9,475 \div 32$. Give the answer with a remainder.

10. $1,263 \div 15$. Give the answer mixed number in its simplest form.

11. $2,950 \div 14$. Give the answer mixed number in its simplest form.

12. $5,687 \div 45$. Give the answer mixed number.

13. 4,598 children go on a trip. Each coach holds 26 children. How many coaches are needed?

14. A ribbon 5,687 cm long is cut into pieces 45 cm long. How many whole pieces can be cut?

15. £6,525 is shared equally between 29 people. How much does each person get?

4. Before you hand it in

In $7,248 \div 24$, writing 32 instead of 302.

After $72 \div 24 = 3$, bring down the 4: $4 \div 24 = 0$, so write 0 on top. Then bring down the 8: $48 \div 24 = 2$.

Getting a remainder bigger than the divisor.

If the remainder is bigger than the divisor, the divisor goes in at least once more. Increase the digit on top.

Writing a remainder of 9 in $3,654 \div 27$ as 135.9.

r 9 means 9 out of 27, which is $9/27 = 1/3$. As a decimal that is 0.333..., not 0.9.

Always rounding the remainder down.

Read the context: people needing seats → round up; complete items that can be made → round down; sharing things that can be split → use a fraction.