

Skill 12

How do I divide using a written method?

Can I divide using long division?

Steps to success

$$25 \overline{)425}$$

1. The first digit of the **dividend** (4) is divided by the **divisor**.

$$25 \overline{)425} \begin{array}{r} 0 \\ \hline \end{array}$$

2. The whole number result is placed at the top. Any remainders are ignored at this point.

$$25 \overline{)425} \begin{array}{r} 0 \\ \hline 0 \\ \hline \end{array}$$

3. Now we **subtract** the bottom number from the top number.

$$25 \overline{)425} \begin{array}{r} 0 \\ \hline 0 \downarrow \\ 42 \\ \hline \end{array}$$

4. Bring down the next digit of the dividend.

$$25 \overline{)425} \begin{array}{r} 0 \\ \hline 0 \downarrow \\ 42 \\ \hline \end{array}$$

5. **Divide** this number by the divisor.

$$25 \overline{)425} \begin{array}{r} 01 \\ \hline 0 \downarrow \\ 42 \\ \hline \end{array}$$

6. The whole number result is placed at the top. Any remainders are ignored at this point.

$$25 \overline{)425} \begin{array}{r} 01 \\ \hline 0 \downarrow \\ 42 \\ \hline 25 \\ \hline \end{array}$$

7. The answer from the above operation is **multiplied** by the divisor. The result is placed under the last number divided into.

$$25 \overline{)425} \begin{array}{r} 01 \\ \hline 0 \downarrow \\ 42 \\ \hline 25 \\ \hline 17 \\ \hline \end{array}$$

8. Now we **subtract** the bottom number from the top number.

$$25 \overline{)425} \begin{array}{r} 01 \\ \hline 0 \downarrow \\ 42 \\ \hline 25 \\ \hline 175 \\ \hline \end{array}$$

9. Bring down the next digit of the dividend.

$$25 \overline{)425} \begin{array}{r} 01 \\ \hline 0 \downarrow \\ 42 \\ \hline 25 \\ \hline 175 \\ \hline \end{array}$$

10. **Divide** this number by the divisor.

$$25 \overline{)425} \begin{array}{r} 017 \\ \hline 0 \downarrow \\ 42 \\ \hline 25 \\ \hline 175 \\ \hline \end{array}$$

11. The whole number result is placed at the top. Any remainders are ignored at this point.

$$25 \overline{)425} \begin{array}{r} 017 \\ \hline 0 \downarrow \\ 42 \\ \hline 25 \\ \hline 175 \\ \hline 175 \\ \hline \end{array}$$

12. The answer from the above operation is **multiplied** by the divisor. The result is placed under the number divided into.

$$25 \overline{)425} \begin{array}{r} 017 \\ \hline 0 \downarrow \\ 42 \\ \hline 25 \\ \hline 175 \\ \hline 175 \\ \hline 000 \\ \hline \end{array}$$

13. Now we **subtract** the bottom number from the top number.
There are no more digits to bring down. The answer must be 17