

Long Division Algorithm

$$\begin{array}{r} 0 \\ 2 \overline{)188} \end{array}$$

Does 2 fit into 1? No way, it's too big!
(so we put a "0" above 1 as a placeholder)

$$\begin{array}{r} 09 \\ 2 \overline{)188} \end{array}$$

Does 2 fit into 18? YES! **9** times. $2 \times 9 = 18$

The **9** goes above the last digit in 18.

$$\begin{array}{r} 1: \quad 9 \\ 2 \overline{)188} \\ 2: \quad \underline{18} \quad 3: \downarrow \\ \quad \quad 08 \end{array}$$

(To simplify the look of things, let's drop that 0 placeholder since $09 = 9$ anyway.)

1: Now we multiply **9** x 2.

2: Subtract (we get 0 here when we subtract).

3: And bring down the **8**.

$$\begin{array}{r} 94 \\ 2 \overline{)188} \\ \underline{18} \\ 08 \\ \underline{08} \\ 0 \end{array}$$

Does 2 fit into 8? YES! **4** times. $2 \times 4 = 8$

The **4** goes up top next to **9**.

Now repeat the three steps above.

1: Multiply **4** x 2.

2: Subtract.

3: There's nothing to bring down! We're done!

$$188 \div 2 = 94$$

YOU DID IT! 😊

Long Division Algorithm

$$\begin{array}{r} 0 \\ 2 \overline{)178} \end{array}$$

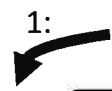


Does 2 fit into 1? No way, it's too big!
(so we put a "0" above 1 as a placeholder)

$$\begin{array}{r} 08 \\ 2 \overline{)178} \end{array}$$

Does 2 fit into 17? YES! **8** times. $2 \times 8 = 16$
(one more 2 would be too big)

The **8** goes above the last digit in 17.

$$\begin{array}{r} 08 \\ 2 \overline{)178} \\ \underline{-16} \\ 18 \end{array}$$

1: 
2: 
3: 

(To simplify the look of things, let's drop that 0 placeholder since $08 = 8$ anyway.)

1: Now we multiply **8** x 2.

2: Subtract (we get 1 here when we subtract).

3: And bring down the **8**.

$$\begin{array}{r} 89 \\ 2 \overline{)178} \\ \underline{-16} \\ 18 \\ \underline{-18} \\ 0 \end{array}$$

Does 2 fit into 18? YES! **9** times. $2 \times 9 = 18$
The **9** goes up top next to **8**.

Now repeat the three steps above.

1: Multiply **9** x 2.

2: Subtract.

3: There's nothing to bring down! We're done!

$$178 \div 2 = 89$$

YOU DID IT! 😊