

# LONG MULTIPLICATION

is just multiplying two numbers



Let's try it!



# A problem

$$\begin{array}{r} 892 \\ \times 11 \\ \hline \end{array}$$

$$892 \times 10 = 8,920$$

$$892 \times 1 = \underline{\quad 892 \quad}$$

The product of any number multiplied by 10 is that number with a zero added



# Add up the answers from the first problems

$$\begin{array}{r} 892 \\ \times 11 \\ \hline \end{array}$$

$$\begin{array}{r} 892 \times 10 = 8,920 \\ 892 \times 1 = 892 \\ \hline 9812 \end{array}$$

$$\begin{array}{r} 20 \\ + 90 \\ \hline 110 \end{array}$$

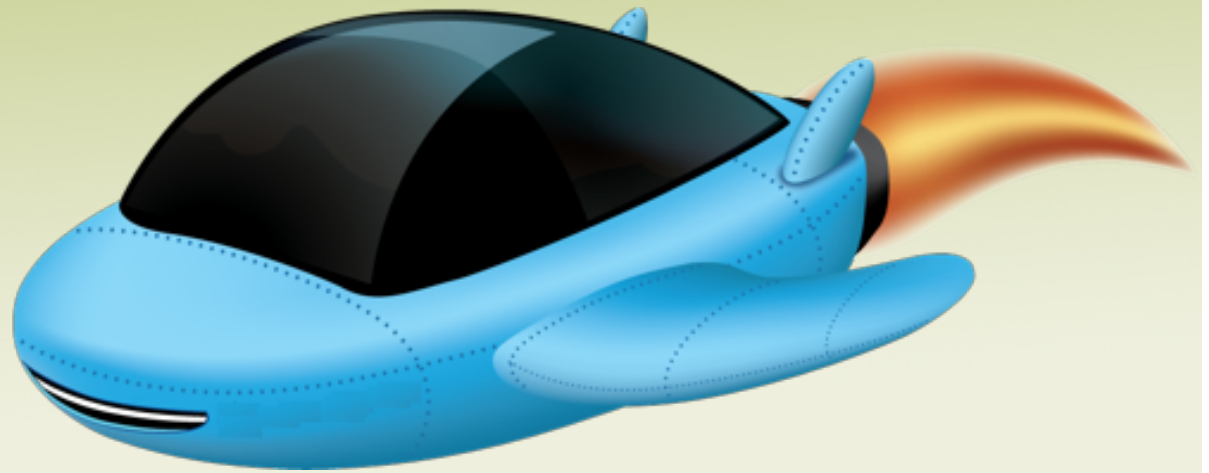
$$100 + 900 + 800 = 1,800$$



# Before you go



# Do a reality check



Could this really be true?



# MATH reality check

$$\begin{array}{r} 892 \\ \times 11 \\ \hline \end{array}$$

$$\begin{array}{r} 900 \\ \times 11 \\ \hline 9,900 \end{array}$$

$$9,812 < 9,900$$



Check!





# MATH reality check

$$\begin{array}{r} 892 \\ \times 11 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 1 \\ \hline 2 \end{array}$$

----- 2

9,812



Check!



# Does this pass a reality check?

$$\begin{array}{r} 892 \\ \times \quad 11 \\ \hline 37,475 \end{array}$$

