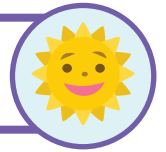




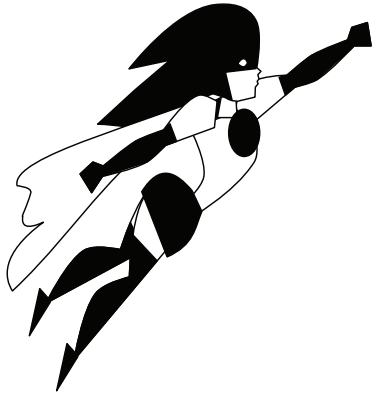
The Super Powers of Ten



Name: _____

Date: _____

Powers of ten are numbers that are divisible by 10.
Review the examples below, then solve the problems.



To multiply a whole number by a power of ten, count the number of zeros after the 1 and add the same number or zeros (or place values) to the end of the whole number you are multiplying.

$$\begin{aligned} 52 \times 10 &= 520 \\ 37 \times 100 &= 3,700 \\ 4 \times 1,000 &= 4,000 \end{aligned}$$

$$\begin{aligned} 0.52 \times 10 &= 5.2 \\ 0.37 \times 100 &= 37 \\ 0.048 \times 1,000 &= 48 \end{aligned}$$

To multiply a decimal by a power of ten, move the decimal point one place to the RIGHT for each zero after the 1.

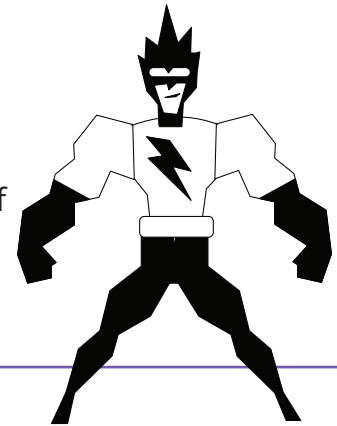
Multiply by the power of ten.

ANSWERS

- 1) $0.45 \times 10 = \underline{4.5}$ 2) $81 \times 1,000 = \underline{81,000}$ 3) $0.216 \times 100 = \underline{21.6}$
- 4) $1.07 \times 100 = \underline{107}$ 5) $973 \times 10 = \underline{9,730}$ 6) $0.75 \times 10,000 = \underline{7,500}$
- 7) $63 \times 1,000 = \underline{63,000}$ 8) $0.059 \times 10 = \underline{0.59}$ 9) $1,048 \times 100 = \underline{104,800}$

$$\begin{aligned} 1.6 \div 10 &= 0.16 \\ 520 \div 10 &= 52 \\ 37 \div 100 &= 0.37 \\ 48 \div 1,000 &= 0.048 \end{aligned}$$

To divide a number by a power of ten, move the decimal point LEFT as many places as there are zeros in power of ten. If there are not enough digits in the number you are dividing, you may add zeros.



Divide by the power of ten.

- 10) $1.27 \div 10 = \underline{0.127}$ 11) $3,948 \div 100 = \underline{39.48}$ 12) $56 \div 1,000 = \underline{0.056}$
- 13) $8 \div 10 = \underline{0.8}$ 14) $470.1 \div 100 = \underline{4.701}$ 15) $2.35 \div 1,000 = \underline{0.00235}$