

Multiplying Decimals

1. Line up numbers (ignore decimals for now)
2. Multiply as usual
3. Count the number of decimal places in the problem
4. Count the same number of decimal places for your answer

Mult.ip x ly.ing Dec.imals

1.23×4.8

$$\begin{array}{r} 1.23 \text{ (2)} \\ \times 4.8 \text{ (1)} \\ \hline 984 \\ 4920 \\ \hline 5904 \end{array} \quad \begin{array}{l} \text{3 decimal} \\ \text{places} \end{array} \quad \boxed{5.904}$$

$4 \bullet 9.7$

$$\begin{array}{r} 9.7 \text{ (1)} \\ \times 4 \\ \hline 38.8 \end{array} \quad \boxed{38.8}$$

$3.6 \bullet 12.5$

$$\begin{array}{r} 3.6 \text{ (1)} \\ \times 12.5 \text{ (2)} \\ \hline 180 \\ 720 \\ 3600 \\ \hline 45.00 \end{array} \quad \boxed{45}$$

$2.8(4.5)$

$$\begin{array}{r} 2.8 \text{ (1)} \\ \times 4.5 \text{ (2)} \\ \hline 140 \\ 1120 \\ \hline 12.60 \end{array} \quad \boxed{12.6}$$

$12.3 \bullet .07$

$$\begin{array}{r} 12.3 \text{ (1)} \\ \times .07 \text{ (2)} \\ \hline 861 \\ 0000 \\ \hline 0.861 \end{array} \quad \boxed{0.861}$$

Evaluate for $x = 2.3$

$.98x$

$$\begin{array}{r} .98 \text{ (2)} \\ \times 2.3 \text{ (1)} \\ \hline 294 \\ 1960 \\ \hline 2.254 \end{array} \quad \boxed{2.254}$$

3.98 • .07

$$\begin{array}{r}
 3.98 \\
 \times .07 \\
 \hline
 2786 \\
 0000 \\
 \hline
 2786
 \end{array}$$

② > 4
②

0.2786

Evaluate for $x = 0.9$

$2.04x$

$$\begin{array}{r}
 2.04 \\
 \times .9 \\
 \hline
 1836
 \end{array}$$

② > 3
①

1.836

Nathan ran 1.2 miles each day for 15 days. How many total miles did he run?

$$\begin{array}{r}
 15 \\
 \times 1.2 \\
 \hline
 30 \\
 150 \\
 \hline
 180
 \end{array}$$

18 miles

Haley bought 3 shirts from Old Navy for \$7.95 each. She also bought 4 scarves for \$9.82. How much total did she spend before taxes?

$$\begin{array}{r}
 7.95 \\
 \times 3 \\
 \hline
 23.85 \text{ shirts} \\
 + 9.82 \text{ scarves} \\
 \hline
 \$ 33.67 \\
 \text{total}
 \end{array}$$

\$ 33.67 total