

Multiplying with Decimals

NCTM Standards 1, 2, 6, 7, 8, 9


First circle the best estimate for each problem. Then multiply. Finally place the decimal point.

<p>1 7.4 closer to</p> $\begin{array}{r} 7.4 \\ \times 5 \\ \hline \end{array}$ <p>35 350 3.5</p>	<p>2 0.81 closer to</p> $\begin{array}{r} 0.81 \\ \times 9 \\ \hline \end{array}$ <p>7.2 72 0.72</p>	<p>3 2.98 closer to</p> $\begin{array}{r} 2.98 \\ \times 4 \\ \hline \end{array}$ <p>1.2 12 0.12</p>
<p>4 6.3 closer to</p> $\begin{array}{r} 6.3 \\ \times 0.4 \\ \hline \end{array}$ <p>24 2.4 0.24</p>	<p>5 1.53 closer to</p> $\begin{array}{r} 1.53 \\ \times 4.2 \\ \hline \end{array}$ <p>40 4 0.4</p>	<p>6 1.8 closer to</p> $\begin{array}{r} 1.8 \\ \times 0.2 \\ \hline \end{array}$ <p>4.0 40 0.40</p>
<p>7 0.12 closer to</p> $\begin{array}{r} 0.12 \\ \times 0.9 \\ \hline \end{array}$ <p>0.12 1.2 12</p>	<p>8 24.37 closer to</p> $\begin{array}{r} 24.37 \\ \times 0.8 \\ \hline \end{array}$ <p>240 2.4 24</p>	<p>9 10.5 closer to</p> $\begin{array}{r} 10.5 \\ \times 5 \\ \hline \end{array}$ <p>50 500 5.0</p>

Solve each problem.

- 10** Each juice bottle contains 67.6 fluid ounces of liquid. You buy 3 bottles.

- A** Is the total number of ounces closer to 2, 20, 200, or 2,000? _____
- B** What is the total number of ounces? Show your work.
- _____ fluid ounces

-  **11** Petunia plants are on sale for \$0.88 each. Jon has \$15. Does he have enough money to buy 15 plants? Explain how you can use estimation to solve the problem.
- _____
- _____

Multiply and then place the decimal point.

$\textcircled{12}$ 41 <u>× 5</u>	4.1 <u>× 5</u>	0.41 <u>× 5</u>	41 <u>× 0.5</u>	4.1 <u>× 0.5</u>	0.41 <u>× 0.5</u>
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$\textcircled{13}$ 16 <u>× 3</u>	1.6 <u>× 3</u>	0.16 <u>× 3</u>	16 <u>× 0.3</u>	1.6 <u>× 0.3</u>	0.16 <u>× 0.3</u>
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$\textcircled{14}$ 36.2 <u>× 0.7</u>

$\textcircled{15}$ 1.73 <u>× 3.1</u>

$\textcircled{16}$ 6.8 <u>× 4.5</u>
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$\textcircled{17}$ 0.3 <u>× 14</u>

$\textcircled{18}$ 2.7 <u>× 5.6</u>
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$\textcircled{19}$ 12.92 <u>× 7.2</u>
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$\textcircled{20}$ **Challenge** Mr. Walker travels 45.8 miles a day to work. He rounded 45.8 miles to 46 miles to figure out that he travels about 184 miles a week to work.

A How many days a week does he travel to work? _____

B How many miles does he travel each week? _____ miles

Show your work.