

# MATH SKILL INFORMATION PAGE

**Pre-Algebra**

**For reference**

## DECIMAL OPERATIONS

<p><b>ADD:</b> <math>48 + 7.3</math></p> $\begin{array}{r} 48.0 \\ + 7.3 \\ \hline 55.3 \end{array}$	<p><b>RULES FOR ADDING DECIMALS:</b></p> <ul style="list-style-type: none"> <li>Line up the decimal points.</li> <li>Integers (numbers without a decimal) do have a decimal, always at the end of the farthest right digit.</li> </ul>
<p><b>SUBTRACT:</b> <math>48 - 7.3</math></p> $\begin{array}{r} 48.0 \\ - 7.3 \\ \hline 40.7 \end{array}$	<p><b>RULES FOR SUBTRACTING DECIMALS:</b></p> <ul style="list-style-type: none"> <li>Same rules as for adding decimals</li> </ul>
<p><b>MULTIPLY:</b> <math>1.45 \times 3.2</math></p> $\begin{array}{r} 1.45 \leftarrow 2 \text{ decimal places} \\ \times 3.2 \leftarrow 1 \text{ decimal place} \\ \hline 290 \\ +4350 \\ \hline 4640 \end{array}$ <p style="text-align: center;"><math>4.640 \leftarrow \text{Total of 3 decimal places}</math></p>	<p><b>RULES FOR MULTIPLYING DECIMALS:</b></p> <ul style="list-style-type: none"> <li><b>DO NOT</b> line up the decimal points.</li> <li>The number of decimal places in the answer is the same as the total number of decimal places in the two original numbers.</li> </ul>
<p><b>DIVIDE:</b> <math>9 \div 0.4</math></p> $\begin{array}{r} 0.4 \overline{) 9.0} \\ \underline{8} \phantom{0} \\ 10 \\ \underline{8} \phantom{0} \\ 20 \\ \underline{20} \\ 0 \end{array}$ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin-left: auto; margin-right: auto;"> <p>Correct answer: <math>9 \div 0.4 = \mathbf{22.5}</math></p> </div>	<p><b>RULES FOR DIVIDING DECIMALS:</b></p> <ul style="list-style-type: none"> <li>Move the decimal points: <ul style="list-style-type: none"> <li>First: move the decimal point of the divisor to the right as far as possible.</li> <li>Second: move the decimal point of the dividend the same number of places that you had to move the divisor's decimal point.</li> </ul> </li> <li>After moving the decimals, rewrite the problem so it's less confusing. This is a suggestion, not a rule, but it often really helps to avoid mistakes.</li> </ul>