

Skills 1/15

PERCENT STUDY GUIDE

PERCENT	<p><u>TO DECIMAL</u> DIVIDE BY 100 (SHORTCUT: Move the decimal two places to the LEFT.)</p> $14\% = \frac{14}{100} = 0.14$	<p><u>TO FRACTION</u> Write the percent over 100 and simplify the fraction.</p> $5\% = \frac{5}{100} = \frac{1}{20}$
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DECIMAL	<p><u>TO PERCENT</u> MULTIPLY BY 100 (SHORTCUT: Move the decimal two places to the RIGHT.)</p> $0.28 = 0.28(100) = 28\%$	<p><u>TO FRACTION</u> READ the number (REMEMBER: only the number after the decimal is written as a fraction), and then simplify the fraction.</p> $1.6 = 1\frac{6}{10} = 1\frac{3}{5}$
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FRACTION	<p><u>TO PERCENT</u></p> <ul style="list-style-type: none"> • Divide numerator by denominator, and move the decimal two places to the RIGHT $\frac{2}{5} = 2 \div 5 = 0.4 = 40\%$ <ul style="list-style-type: none"> • Set up a percent proportion & solve. $\frac{2}{5} = \frac{x}{100} \quad 5x = 200$ $x = 40\%$	<p><u>TO DECIMAL</u> Divide the numerator by the denominator.</p> $\frac{3}{5} = 3 \div 5 = 0.6$
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<p><u>PERCENT PROPORTION</u></p> $\frac{\text{is}}{\text{of}} = \frac{\%}{100}$ <p>28 is 40% of what number?</p> $\frac{28}{x} = \frac{40}{100}$ $40x = 2800$ $x = 70$	<p><u>PERCENT WORD PROBLEMS</u></p> $\frac{\text{part}}{\text{whole}} = \frac{\%}{100}$ <p>There are 44 students in Mrs. Gizzi's math classes of which 25% received an A on the last test. How many students got an A?</p> $\frac{x}{44} = \frac{25}{100}$ $100x = 1100$ $x = 11$
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PERCENTS WITH \$:
 MULTIPLY AMOUNT BY % (written as a decimal).

A video game store has a 20% off sale on all games. How much would you save on a game that originally cost \$32?

$$\begin{array}{r} 32 \\ \times .2 \\ \hline 6.4 \end{array} \rightarrow \$6.40$$

TO CALCULATE FINAL COST: DISCOUNT → DEDUCT TAX & TIP → ADD