Percent Proportions:

Use the formula:

\[
\text{%} = \frac{\text{is}}{\text{of}} \times 100
\]

"Is" is the part, while "Of" is the whole.

(Don't be fooled: Sometimes the Part is bigger than the whole! Think of Extra Credit."

Examples:

What percent of 25 is 13? 52%

What is 35% of 40? 14

16 is 25% of what number? 64

What percent of 25 is 13? 52%

To Change a Fraction to a Percent:

• Divide the numerator by the denominator.

• Move the decimal point 2 places to the right.

Examples:

\[
\frac{2}{3} = 66.6\%
\]

\[
\frac{7}{8} = 87.5\%
\]

\[
\frac{1}{2} = 50\%
\]

\[
\frac{3}{4} = 75\%
\]

To Change a Percent to a Fraction:

• Write the percent over 100 and reduce the fraction.

OR

• Change the percent to a decimal and use the place value name to write the fraction.

Examples:

9% = \frac{9}{100}

36% = \frac{9}{25}

87.5% = \frac{7}{8}

60% = \frac{3}{5}

15% = \frac{3}{20}
Calculating Sales Tax
1. Change percent to a ___decimal____ by moving the decimal ___2___ places to the ___left____.
2. ___Multiply_____ dollar amount by the sales tax decimal.
3. ADD sales tax to calculate total.

Example:
Calculate 8.75% sales tax and total cost for a $48 purchase.

Sales tax $4.20
Total $52.20

Calculating Discount and Sale Price
1. Change percent to a ___decimal____.
2. ___Multiply_____ dollar amount by the discount decimal.
3. SUBTRACT discount price from original to calculate total.

Example:
Calculate discount and sale price for a $64 item marked 35% off.

Discount $22.40
Sale Price $41.60