## Review: Decimals and Percent

A percent is a fraction out of 100 . For example a mark of $86 \%$ on a test is the equivalent of 86 out of 100.

To change a percent into a decimal, simply divide the number by 100 .
Example: What is $67 \%$ as a decimal?

To change a decimal into a percent, multiply the decimal by 100
Example what is 0.76 as a percent?

To change a fraction to a decimal or percent, divide the numerator by the denominator and multiply by 100.

Example What percent is $\frac{3}{5}$

HINT: When multiplying by 100 move the decimal two places to the right. When dividing by 100 move the decimal two places to the left.

## Practice 1:

1. Write each percent as a decimal
a. $25 \%$
b. 7\%
c.15\%
d. $1.5 \%$
e. $47 \%$
f. $12.5 \%$
g. $150 \%$
h. $0.2 \%$
i. $200 \%$
2. Write each decimal as a percent
a. 0.65
b. 0.04
c. 0.12
d. 0.055
e. 0.1
f. 0.002
3. Write each fraction as a decimal and percent.
a. $\frac{2}{5}$
b. $\frac{5}{8}$
c. $\frac{1}{3}$
d. $\frac{4}{3}$
e. $\frac{5}{7}$
f. $\frac{3}{9}$

Calculating percentages. To find a percent of a number either convert the percent to a decimal and multiply or use proportional reasoning

Example: Find 20\% of 45
Solution A - Convert 20\% to a decimal and multiply

Solution B - Set up the proportion and solve with cross multiply \& divide

Practice 2: Find the percent of each number (round to one decimal place where necessary)
a. $15 \%$ of 300
b. $45 \%$ of 1500
c. $140 \%$ of 170
d. $0.3 \% 175$
e. $80 \%$ of 50
f. $10 \%$ of 65
g. $200 \%$ of 50
h. $25 \%$ of 700

