M8 - 4.1 - Converting Fractions, Decimals & % Notes

Fraction to decimal:

$$\frac{1}{10} = 0.1$$

Memorization. See Review and Tables

$$\frac{3}{4} = 0.75$$

Use a calculator or Long Division.

> ***Bottom goes into top.***
>
> bottom $\overline{)\ \text{top}}$

Decimal to Fraction:

$$0.63 = \frac{63}{100}$$

Memorization. See Review and Tables

Decimal to Percent

$$0.06 = \frac{6}{100} = 6\%$$

Multiply decimal by 100 (or move decimal 2 places to the right)

Percent to Decimal

$$19\% = \frac{19}{100} = 0.19$$

Divide percent by 100 (or move decimal 2 places to the left)

Fraction to percent:

$$\frac{1}{10} = \frac{10}{100} = 10\%$$

× 10

× 10

Find the Equivalent Fraction whose denominator is 100.

The number in the numerator is the percent.

Percentage (%): The top of a fraction over 100.

Percent to Fraction

÷ 25

$$75\% = \frac{75}{100} = \frac{3}{4}$$

÷ 25

Percentages are the top of a fraction over 100.

Simplify.

M8 - 4.2 - % "of" a # Notes

What is 8% tax on $ 100 shoes?

$\times 1$

$$\frac{8}{100} = \frac{8}{?}$$

$\times 1$

$ 100 *shoes*

= $ 8

What is 8% tax on $ 50 shoes?

$\div 2$

$$\frac{8}{100} = \frac{4}{?}$$

$\times 2$

$ 50 *shoes*

= $ 4

If 20% of a numbe3 is 10, What is the number?
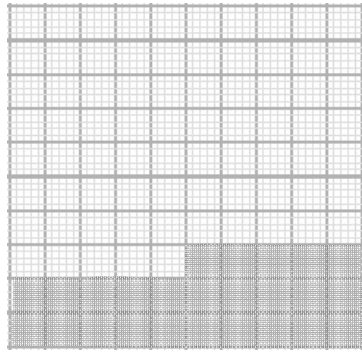
$$\frac{20}{100} = \frac{10}{?}$$

50 *is the number*
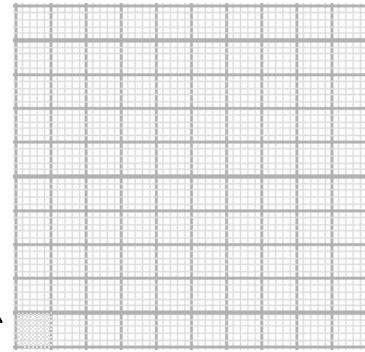
= 50

Percentages can be thought of as shaded areas
of a 100 square box.

1 shaded square = 1 %
of 100 squares

$$\frac{25}{100} = 25\% = 0.25$$

$$\frac{1}{100} = 1\% = 0.01$$

$$\frac{5}{100} = 0.05 = 5\%$$

$$\frac{15}{100} = 0.15 = 15\%$$
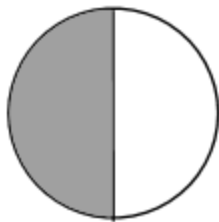
$$\frac{50}{100} = 0.50 = 50$$

$$\frac{125}{100} = 1.25 = 125\%$$
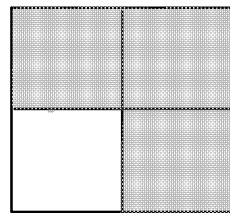
$$\frac{10}{100} = 0.10 = 10\%$$

$$\frac{20}{100} = 0.20 = 20\%$$

$$\frac{100}{100} = 1.00 = 100\%$$

$$\frac{200}{100} = 2.00 = 200\%$$

$$\frac{1}{2} = \frac{50}{100} = 50\%$$

$$\frac{3}{4} = \frac{75}{100} = 75\%$$