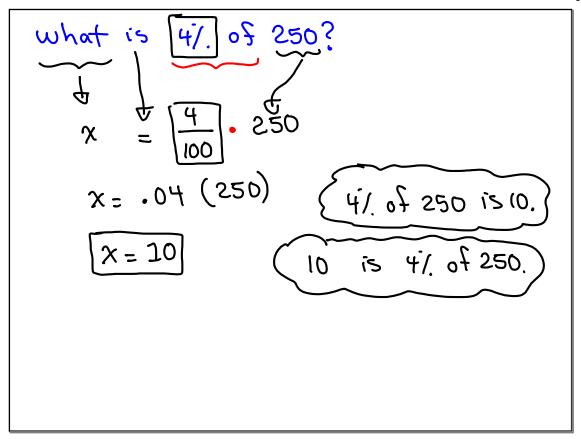
Math 107
Spring 2017
Lecture 2

Ch. 2: Basic Percent
(1) By translation (2) By Proportion
what, what number x
$P/$, what percent $\frac{P}{100}$
· \$
is, get, become, equal =
$O \circ P \qquad \frac{P}{O}$



87. of what number is 400?

$$87. \times = 400$$

 $08 \cdot \times = 400$
 $08 \times = 400$

What Percent of 250 is 750?

$$\frac{P}{100} = 250 = 750$$
 $\frac{25}{2.50} = 750$
 $\frac{25}{10} = 750$

what percent is
$$\frac{3}{8} = \frac{3}{100} = \frac{3}{8}$$

Multiply both Sides by 100

 $\frac{P}{100} = \frac{300}{8} = \frac{37.5}{100} = \frac{300}{8}$
 $\frac{P}{8} = \frac{300}{8} = \frac{37.5}{8} = \frac{37.5}{8} = \frac{37.5}{8} = \frac{300}{8} = \frac{37.5}{8} = \frac{37.5}{8} = \frac{300}{8} = \frac{37.5}{8} = \frac{300}{8} = \frac{37.5}{8} = \frac{300}{8} = \frac{37.5}{8} = \frac{37.5}{8} = \frac{300}{8} = \frac{37.5}{8} = \frac{37.5}{8} = \frac{37.5}{8} = \frac{300}{8} = \frac{37.5}{8} = \frac{37.5}{8} = \frac{300}{8} = \frac{37.5}{8} = \frac{300}{8} = \frac{37.5}{8} = \frac{3$

4.5% of what number is 150?

4.5%
$$\chi = 150$$

.045 $\chi = 150$
 $\chi = \frac{150}{.045}$

About 4.5% of 3333 is 150.

120/. of what number is 600?
12
$$x = 600$$

10 $x = 600$
1.2 $x = 600$

A computer is on Sale @ 20% OFF.

the Sale price is \$680.

We are paying find the original price.

80% of original price is the Sale price.

80% of original price is the Sale price.

80% of
$$x = 680$$
 $x = 680$
 $x = 850$
 $x = 850$
 $x = 850$

Lisa works at a dealership and gets

Paid by Commission. Her Salary is 4%.

of her Sales.

Last month, her Salary was \$2800.

Find the amount of her Sale.

4% of her Sale is her Salary

4% of \$\chi = 2800

OH * \$\chi = 2800

Next \$\chi = 2800

her Sale was

week: wp ch.2

Ratio of a to b is
$$\frac{a}{b}$$

Ratio of 1.5 to 45 is $\frac{1.5}{45}$

$$\frac{1.5}{45} = \frac{1.5(10)}{45(10)} = \frac{15}{450} = \frac{18.1}{15.30} = \frac{1}{30}$$

If we equate two ratios, we get

To Solve a proportion, we cross-Multiply

20
$$\chi = 50 (1.5)$$

 $\chi = \frac{50 (1.5)}{20} \left[\chi = 3.75 \right]$

3.75 cops of Sugar for 50 multins.

2.5 inches on the map is for 400

actual miles.

Two cities were 8 inches apart on the map.

Sind actual distance.

$$\lambda = \frac{8(400)}{2.5}$$