

# A3 Notes #3 Percents in "Real-Life"

Note Title

30/10/2013

recall:

Percents

Fractions

Decimals

$$53\%$$

$$\frac{53}{100}$$

$$0.53 \times 100$$

↑↑ 2 zeros,  
move Left 2 spots  
base 100

place value  
hundredths

$$7\%$$

$$\frac{7}{100}$$

$$0.07$$

$$1.4\%$$

$$\frac{14}{1000}$$

$$0.014 \times 100$$

$$\frac{1.4}{100} \times 10$$

$$110\%$$

$$\frac{110}{100}$$

$$1.10$$

$$66\%$$

$$\frac{33}{50} \times 2 = \frac{66}{100}$$

$$0.66$$

$$0.0273\%$$

$$\frac{273}{1,000,000}$$

$$0.0000273 \times 100$$

$$29\frac{4}{5}\% \Rightarrow 29.8\%$$

$$\frac{29.8}{100} \times 10 = \frac{298}{1000}$$

$$0.298$$

$$\frac{4 \times 2}{5 \times 2} = \frac{8}{10} = 0.8$$

NEW

★ If you see the word "OF" in a question, it means  $\times$  (multiply)

★ If you see a Percent in a question, convert into DECIMAL

ex: 45% of \$87?

$$\frac{45}{100} = 0.45 \times \$87 = \$39.15$$

★ Taxes are calculated from  $\times$  to subtotal, then adding back to the subtotal.

★ Discounts/sales are calculated from x to subtotal, then subtracting from subtotal. Then calculate the taxes.

★ Commission★ wage earned using a percent of an amount sold (ex: real estate)

ex: 5% of \$400,000?

$$\frac{5}{100} = 0.05 \times \$400,000 = \boxed{\$8,000}$$

Examples:

hint: taxes 1<sup>st</sup> & 2<sup>nd</sup>  
don't round until  
the final step

1) What would the final price be on:

a) 12% taxes on a subtotal of \$75.25?

$$\frac{12}{100} \Rightarrow 0.12 \times \$75.25 = \$9.03 \text{ taxes added}$$

$$\$9.03 + \$75.25 = \boxed{\$84.28}$$

b) 12% taxes on a subtotal of \$129.99?

$$\frac{12}{100} = 0.12 \times \$129.99 = \$15.5988 \text{ taxes}$$

$$\$15.5988 + \$129.99 = \$145.5888 = \boxed{\$145.59}$$

↑  
up

c) 3 movie tickets for \$10.95 each, 2 medium popcorn for \$4.99 each, and 1 large drink for \$5.99 after 12% taxes.

$$3 \times \$10.95 = \$32.85 \quad 2 \times \$4.99 = \$9.98$$

$$\text{subtotal} = \$32.85 + \$9.98 + \$5.99 = \$48.82$$

$$\text{taxes} = 0.12 \times \$48.82 = \$5.8584$$

$$\text{total} = \$5.8584 + \$48.82 = \$54.6784 = \boxed{\$54.68}$$

↑

2. How much will you earn if you receive 6.3% commission on a house sale of \$330,000?

$$\frac{6.3}{100} = 0.063 \times \$330,000 = \boxed{\$20,790}$$