

# Percents

\* When and where do we use percents?

\* tax on items, gratuity (tips), discounts, etc.

\* How are percents and decimals similar?

\* You can write any percent as a decimal or any decimal as a percent!

# Let's try a problem!

\* Hot dogs at a carnival cost \$2.99 each plus 7% tax.  
What is the total cost for one hot dog?

\* First, we need to figure out the tax for the item - but what operation should we use?

\* MULTIPLICATION!!

\* But how do we write 7% in our math problem?

\*  $7\% = 0.07$  as a decimal

# Let's try a problem!

Hot dogs at a carnival cost \$2.99 each plus 7% tax.  
What is the total cost for one hot dog?

\*  $2.99 \times 0.07$

\* Is that the total cost of the hot dog or just the tax?

\* Just the tax - so what do we do next?

\* add \$0.21 to 2.99 to get our total bill of ...

\* Answer ... \$0.2093

\* \$3.20

# Another Example

Sheldon and Amy go to a restaurant for dinner. Their meals total \$ 13.75. The tax is 5%.

\* How much tax is added to the bill?

\* They also want to leave a 15% tip based on the bill and the tax combined. How much should they leave? Explain.

\* What is their TOTAL bill?

# Answers!

\* Tax = \$0.6875 so \$14.4375 ~ \$14.44

\* Tip = \$2.166 so \$2.17

\* Total Bill = \$16.61

# Your Turn!

Penny and Leonard went to lunch at the Cheesecake Factory. Their meals total \$28.00. The tax is 6%. What is the total cost of the bill?

Leonard also wants to leave a 20% tip based on the total cost of the bill. How much of a tip should they leave?

Answers... \$29.68 and \$5.936 ~\$5.94

# What about discounts?

Howard Wolowitz was buying a new Batman belt buckle, which was originally \$24.95. However, he has a coupon for 20% off. What is the sale price?

\*  $24.95 \times 0.20$

\* Is that the total cost of the belt buckle or just the discount?

\* Just the discount - so what do we do next?

\* Subtract \$4.99 from \$24.95 to get our total bill of ...

\* \$4.99

\* \$19.96

# Another Example

The producers at “Family Feud” surveyed 1500 people. They asked the surveyors to “Name America’s favorite sport.”

56% of the people named football. How many people said football?

26% of the people named basketball. How many people said basketball?

Answers: 840 people and 390 people

# Your Turn!

Raj Koothrappali wants to purchase a comic at Amazon.com for 56.99 with a 15% off coupon, the same comic is 54.99 at Barnes & Nobel with a \$5.00 off coupon. Which is the better buy?

\* \$48.41 or \$49.99 so the better buy is Amazon.

Percent worksheet  
**SHOW ALL WORK!**

Quiz next class!