

Name _____

Date: _____

Class: _____

Percent of a number, tax, tip, and discount.

Show work for all questions.

1. What is 75% of 80?

- A. 20 B. 40 C. 60 D. 75

2. 22 is what percent of 220?

- A. 10% B. 22% C. 44% D. 198%

3. In a survey, 75% of 400 parents said they give their children fruit as a snack. How many parents of those surveyed is this?

- A. 150 B. 200 C. 225 D. 300

4. Adam and Karl go to a restaurant for dinner. Their meals total \$13.75. The sales tax is 5%.

a. How much tax is added to the bill?

a. _____

b. They want to leave a 15 % tip based on the bill AND the tax combined. How much should they leave?

b. _____

5. The Science Supply Store is having a sale. All graduated cylinders are 25% off. Mrs. Langlois buys four graduated cylinders that were originally \$8 each and six that were originally \$9.50 each.

a. How much money will Mrs. Langlois save?

a. _____

b. If the sales tax is 4%, what will Mrs. Langlois' total cost be?

b. _____

6. The local boutique is having a sale on hats. All regular priced hats are 20% off. Shirley, Lisa, and Sandy each find a hat to buy.

a. Shirley' beach hat was originally \$24.95. What is the sale price?

a. _____

b. Sandy finds a sun visor that was originally \$12.50. What is the sale price?

b. _____

c. Lisa finds a hat that is already marked down. The price tag show the original price was \$36. The marked down price is \$18. What percent has the hat been marked down?

c. _____

Name Key
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Percent of a number, tax, tip, and discount.

How work for all questions.

1. What is 75% of 80?
A. 20 B. 40

C. 60 D. 75

$$\frac{75}{100} = \frac{x}{80}$$

$$\frac{100x}{100} = \frac{6000}{100}$$

x = 60

2. 22 is what percent of 220?
A. 10% B. 22%

C. 44% D. 198%

$$\frac{\%}{100} = \frac{22}{220}$$

$$\frac{220x}{220} = \frac{2200}{220}$$

x = 10%

3. In a survey, 75% of 400 parents said they give their children fruit as a snack. How many parents of those surveyed is this?

A. 150 B. 200 C. 225 D. 300

$$\frac{75}{100} = \frac{x \text{ fruit parents}}{400 \text{ total parents}}$$

4. Adam and Karl go to a restaurant for dinner. Their meals total \$13.75. The sales tax is 5%.

a. How much tax is added to the bill?

$$\frac{5}{100} = \frac{x}{13.75}$$

$$\frac{100x}{100} = \frac{68.75}{100}$$

x = \$0.69

a. Tax: \$0.69

- b. They want to leave a 15% tip based on the bill AND the tax combined. How much should they leave?

Total w/ Tax

$$\$13.75 + \$0.69 = \$14.44$$

b. Tip: \$2.17

$$\frac{15}{100} = \frac{x}{14.44}$$

$$\frac{100x}{100} = \frac{216.6}{100}$$

x = \$2.17

5. The Science Supply Store is having a sale. All graduated cylinders are 25% off. Mrs. Langlois buys four graduated cylinders that were originally \$8 each and six that were originally \$9.50 each.

a. How much money will Mrs. Langlois save?

$$25\% \text{ off } \frac{25}{100} = \frac{x}{89}$$

$$\frac{100x}{100} = \frac{2225}{100}$$

$$x = \$22.25$$

$$\text{Total } 4 \times \$8 + 6 \times \$9.50 = \$89$$

a. Saves: \$22.25

b. If the sales tax is 4%, what will Mrs. Langlois' total cost be?

Tax

$$\frac{4}{100} = \frac{x}{66.75}$$

$$\frac{100x}{100} = \frac{267}{100}$$

$$x = \$2.67$$

Total:

$$\$66.75$$

$$+ 2.67$$

$$= \$69.42$$

b. Total: \$69.42

Total - Discount

$$\$89.00$$

$$- 22.25$$

$$= \$66.75$$

6. The local boutique is having a sale on hats. All regular priced hats are 20% off. Shirley, Lisa, and Sandy each find a hat to buy.

a. Shirley's beach hat was originally \$24.95. What is the sale price?

$$\frac{80}{100} = \frac{x}{24.95}$$

$$\frac{100x}{100} = \frac{1996}{100}$$

$$x = 19.96$$

a. Sale Price: \$19.96

b. Sandy finds a sun visor that was originally \$12.50. What is the sale price?

$$\frac{80}{100} = \frac{x}{12.50}$$

$$\frac{100x}{100} = \frac{1000}{100}$$

$$x = 10$$

b. Sale Price: \$10.00

c. Lisa finds a hat that is already marked down. The price tag show the original price was \$36. The marked down price is \$18. What percent has the hat been marked down?

$$\frac{\%}{100} = \frac{18}{36}$$

$$\frac{36x}{36} = \frac{1800}{36}$$

$$x = 50$$

c. % Markdown: 50%