

Unit 6 Study Guide

Finding the Part

- a. What is 15% of 23? B. What is 25% of 86? C. What is 30% of 79?

Finding the Percent

- a. 30 is what percent of 70? B. 15 is what percent of 45? C. .22 is what percent of 120?

Finding the Whole

- a. 30 is 60% of what number? B. 50 is 40% of what number? C. 75 is 20% of what number?

Discount

- a. A pair of shoes is normally \$60, but is on sale for 30% off. If I have a coupon for an additional 10% off the discounted price, what will I pay for the jacket?
- b. A cookies is normally \$1.50, but is on sale for 25% off. If I have a coupon for an additional 50% off the discounted price, what will I pay for the cookie?
- c. A pair of shoes is normally \$120, but is on sale for 60% off. If I have a coupon for an additional 30% off the discounted price, what will I pay for the shoes?
- d. A store is having a 20% off sale. If I bought a necklace for \$37.60, what was the original price?
- e. A amusement park is having a special where all their tickets are 60% off. If I paid \$48 to go, how much was full price?

Mark Up

- a. A store buys a pot for \$5. They need to make 40% profit. How much should they sell it for?

- b. A store buys a towel for \$3. They want to make 50% profit. How much should they sell it for?

- c. A store makes 60% profit. If they sold a pair of glasses for \$19.20, how much did they buy them for?

Percent Change

Find the percent change of each:

- a. $5 \rightarrow 7$
- b. $6 \rightarrow 2$
- c. $10 \rightarrow 13$
- d. $38 \rightarrow 57$
- e. $80 \rightarrow 25$
- f. $12 \rightarrow 8$

Interest

- a. If Bob borrows \$500 and agrees to pay 3% simple interest weekly, how much interest will he pay after 3 weeks?

- b. If Bob borrows \$200 and agrees to pay 0.3% interest weekly, how much interest will he pay after 3 weeks?

- c. If Bob borrows \$500 and agrees to pay 0.3% interest weekly, how much interest will he pay after 12 weeks?

Proprtions

- a. If 5lbs of dog food costs \$12.50, how much will 7lbs of dog food cost?
- b. A shade of purple is made from mixing 1 part red to 2 parts blue. If I use 3 gallons of blue, how much red will I need?
- c. If a car gets 22 miles per gallon, how much gas is used to go 100 miles?
- d. $\frac{5}{x} = \frac{10.5}{6}$
- e. $\frac{3}{8.2} = \frac{x}{5}$

Review- Graphs, Equations, Order of Operations

- a. Graph $y = 2x$, graph $y = 3x + 2$ graph $y = 3x - 1$
- b. Solve for x: $3x + 2x - 6 = -2x + 6$
- c. Solve for x: $2 - (3x + 2) = x + 5$
- d. Solve for x: $2 - 2(3x - 2) = x + 2$

e. Solve for p: $m + 2p = 6$

f. Solve for U: $2x + 3U = 6$

g. Solve for T: $2T + 3T - (x + 2) = T + 3$

h. Simplify $6 - 3 \div 6 \cdot 2$

i. Simplify $\frac{12 \div 2(3+2)}{6-7(0-1) \div 2}$