

**Unit 2, Day 12 Homework**  
Principles

Name: \_\_\_\_\_  
Pd: \_\_\_\_\_ Date: \_\_\_\_\_

*OBJECTIVE: To write and solve equations from word problem situations.*

**SHOW ALL WORK! Read each situation slowly and carefully.**

- 1.) During the 2002 regular season of the National Football League, running back Michael Bennet played in 16 games and averaged 81 rushing yards per game. Find his total rushing yards by using the equation below to write and solve an equation.

$$\frac{\text{Total Rushing Yards}}{\text{\# of Games Played}} = \text{Average Rushing yards per game}$$

- 2.) You can read about 30 pages per hour. You buy a book that is 540 pages. How long does it take you to read the book? Write and solve an equation.

- 3.) You need new tires. At Jay Tires, you can buy a new set for \$408. Of course you want a professional to install and re-align your vehicle, so you are willing to pay \$25 an hour for installation.

- a.) Complete the following equation.

**Total Bill =**

- b.) How long did the mechanic work on your car if the total bill was \$658.00? Use part a to write and solve an equation.

4.) Kayla has a job that pays \$8.50 per hour. She must pay \$30 for her new uniform, which will be deducted from her first paycheck.

a.) Complete the following equation.

**First Paycheck =**

b.) How many hours did Kayla work if her paycheck came out to be \$310.00? Use part a to write and solve an equation.

5.) A hang glider makes a running start off a 600 foot high cliff. She is such an expert that her speed towards the ground is held consistently at 40 feet per minute.

a.) Complete the following equation.

**Altitude =**

b.) How long will it take the hang glider to reach the ground (0 feet)? Use part a to write and solve an equation.

6.) The government of Nepal charges a fee to mountaineering teams that attempt to climb the nation's peaks. The climbing fee for one of Nepal's peaks is \$3,000 plus \$250 per team member.

a.) Complete the following equation.

**Total Fee =**

b.) The expedition team allocated \$5,250 of their grant money towards the climbing fee. How many people can go on the expedition? Use part a to write and solve an equation.