

## Lesson 11 Practice Problems

1. A car dealership pays \$8,350 for a car. They mark up the price by 17.4% to get the retail price. What is the retail price of the car at this dealership?
2. A store has a 20% off sale on pants. With this discount, the price of one pair of pants before tax is \$15.20. What was the original price of the pants?
  - A. \$3.04
  - B. \$12.16
  - C. \$18.24
  - D. \$19.00
3. Lin is shopping for a couch with her dad and hears him ask the salesperson, "How much is your commission?" The salesperson says that her commission is  $5\frac{1}{2}\%$  of the selling price.
  - a. How much commission will the salesperson earn by selling a couch for \$495?
  - b. How much money will the store get from the sale of the couch?

4. A college student takes out a \$7,500 loan from a bank. What will the balance of the loan be after one year (assuming the student has not made any payments yet):

a. if the bank charges 3.8% interest each year?

b. if the bank charges 5.3% interest each year?

(From Unit 4, Lesson 9.)

5. Match the situations with the equations.

a. Mai slept for  $x$  hours, and Kiran slept for  $\frac{1}{10}$  less than that.

$$y = 2.33x$$

$$y = 1.375x$$

b. Kiran practiced the piano for  $x$  hours, and Mai practiced for  $\frac{2}{5}$  less than that.

$$y = 0.6x$$

$$y = 0.9x$$

c. Mai drank  $x$  oz of juice and Kiran drank  $\frac{4}{3}$  more than that.

$$y = 0.75x$$

$$y = 1.6x$$

d. Kiran spent  $x$  dollars and Mai spent  $\frac{1}{4}$  less than that.

$$y = 0.7x$$

$$y = 2.5x$$

e. Mai ate  $x$  grams of almonds and Kiran ate 1.5 times more than that.

f. Kiran collected  $x$  pounds of recycling and Mai collected  $\frac{3}{10}$  less than that.

g. Mai walked  $x$  kilometers and Kiran walked  $\frac{3}{8}$  more than that.

h. Kiran completed  $x$  puzzles and Mai completed  $\frac{3}{5}$  more than that.

(From Unit 4, Lesson 5.)