

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.)