Unit 4, Lesson 11: Percentage Contexts

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 $\frac{5}{2}$% 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

b. Kiran practiced the piano for $x$ hours, and Mai practiced for $\frac{2}{5}$ less than that.  
   
y = 1.375x

c. Mai drank $x$ oz of juice and Kiran drank $\frac{4}{3}$ more than that.  
   
y = 0.9x

d. Kiran spent $x$ dollars and Mai spent $\frac{1}{4}$ less than that.  
   
y = 1.6x

e. Mai ate $x$ grams of almonds and Kiran ate 1.5 times more than that.  
   
y = 0.7x

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)