### Lesson 8 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?
   1. $3.04
   2. $12.16
   3. $18.24
   4. $19.00
3. A music store marks up the instruments it sells by 30%.
   1. If the store bought a guitar for $45, what will be its store price?
   2. If the price tag on a trumpet says $104, how much did the store pay for it?
   3. If the store paid $75 for a clarinet and sold it for $100, did the store mark up the price by 30%?
4. A family eats at a restaurant. The bill is $42. The family leaves a tip and spends $49.77.
   1. How much was the tip in dollars?
   2. How much was the tip as a percentage of the bill?
5. The price of gold is often reported per ounce. At the end of 2005, this price was $513. At the end of 2015, it was $1060. By what percentage did the price per ounce of gold increase?
6. A phone keeps track of the number of steps taken and the distance traveled. Based on the information in the table, is there a proportional relationship between the two quantities? Explain your reasoning.

| * number of steps | * distance in kilometers |
| --- | --- |
| * 950 | * 1 |
| * 2,852 | * 3 |
| * 4,845 | * 5.1 |

* (From Unit 5, Lesson 4.)

1. 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):
   1. if the bank charges 3.8% interest each year?
   2. if the bank charges 5.3% interest each year?

* (From Unit 6, Lesson 6.)

1. Match the situations with the equations.
   1. Mai slept for hours, and Kiran slept for less than that.
   2. Kiran practiced the piano for hours, and Mai practiced for less than that.
   3. Mai drank oz of juice and Kiran drank more than that.
   4. Kiran spent dollars and Mai spent  less than that.
   5. Mai ate  grams of almonds and Kiran ate 1.5 times more than that.
   6. Kiran collected pounds of recycling and Mai collected less than that.
   7. Mai walked kilometers and Kiran walked more than that.
   8. Kiran completed puzzles and Mai completed more than that.

* (From Unit 6, Lesson 2.)



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