## Lesson 12 Practice Problems

1. A music store marks up the instruments it sells by $30 \%$.
a. If the store bought a guitar for $\$ 45$, what will be its store price?
b. If the price tag on a trumpet says $\$ 104$, how much did the store pay for it?
c. If the store paid $\$ 75$ for a clarinet and sold it for $\$ 100$, did the store mark up the price by $30 \%$ ?
2. A family eats at a restaurant. The bill is $\$ 42$. The family leaves a tip and spends \$49.77.
a. How much was the tip in dollars?
b. How much was the tip as a percentage of the bill?
3. 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?
4. 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 2, Lesson 7.)
5. Noah picked 3 kg of cherries. Mai picked half as many cherries as Noah. How many total kg of cherries did Mai and Noah pick?
A. $3+\frac{1}{2}$
B. $3-\frac{1}{2}$
C. $\left(1+\frac{1}{2}\right) \cdot 3$
D. $1+\frac{1}{2} \cdot 3$
(From Unit 4, Lesson 4.)

