### Lesson 12 Practice Problems

1. 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%?
2. 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?
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.)
1. 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?
	1. $3+\frac{1}{2}$
	2. $3−\frac{1}{2}$
	3. $\left(1+\frac{1}{2}\right)⋅3$
	4. $1+\frac{1}{2}⋅3$
* (From Unit 4, Lesson 4.)



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