

Name _____ Date _____ Period _____

Math Homework 8

1. In 25 minutes Li can run 10 laps around the track. Determine the number of laps she can run per minute.

a. Find the constant of proportionality (k) in this situation.

b. Write an equation to represent the relationship where x represents time (minutes) and y represents the number of laps.

2. Jennifer is shopping with her mother. They pay \$2 per pound for tomatoes at the vegetable stand.

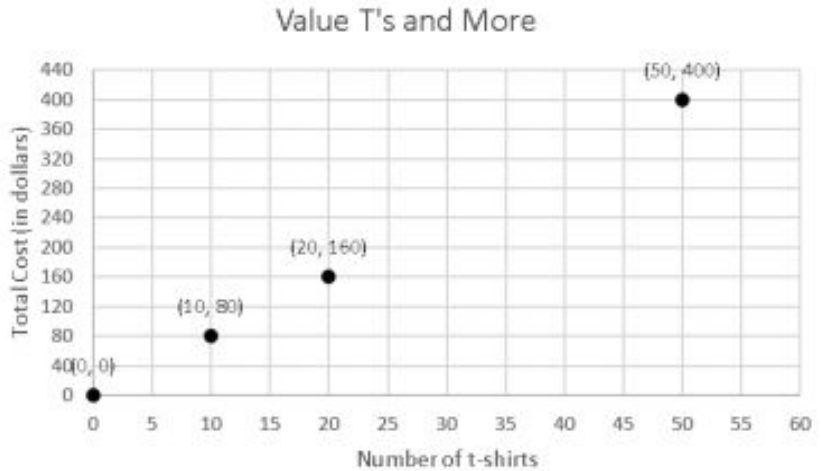
a. Find the constant of proportionality (k) in this situation.

b. Write an equation to represent the relationship where x represents the total weight of tomatoes bought (pounds) and y represents cost (\$).

3. Allison’s school has designed t-shirts for all the 7th graders. Allison has volunteered to call local stores to get an estimate on the total cost of purchasing t-shirts. Print-o-Rama charges a set-up fee, as well as a fixed amount for each shirt ordered. Value T’s and More charges \$8 per shirt.

Print-o-Rama

Number of shirts	Total Cost (\$)
10	80
20	140
30	200
40	260
50	



- How much would 50 shirts from Print-O-Rama cost? Show work or explain your answer and fill in the table.
- What is the set-up fee at Print-O-Rama? Show work or explain your answer.
- Does either pricing model represent a proportional relationship between the quantity of t-shirts and the total cost? Explain.
- How much would 70 shirts cost from each company? If you need to buy 70 shirts, which company should you use? Explain your answer.