

Unit Test (continued, page 2)

.....

2. The local Farm Market sells peppers at five for \$4.75.

a. Complete the rate table.

Number of Peppers	1	2	3	4	5	10	15	20	100
Cost					4.75				

b. How many peppers could you buy for \$20?

c. Describe what the graph of this data would look like and name a point on the graph.

d. Write an equation that relates the number of peppers, n , and the cost, C .

e. What is the constant of proportionality? How do you know?

Unit Test (continued, page 3)

.....

3. Suppose a worker made \$67,000 in 2019. In 2020, she got a 3% raise. How much did she make in 2020? Show your work.

4. Imagine that there is very small country named Trig. There are three states in Trig with the populations show below. The Trig Congress in the government has a total of 35 representative members. The members are proportional to the population from each state.



States in Trig	Population
Cosine	590 people
Tangent	760 people
Sine	140 people

- a. How many members are they from each state?

- b. If they increase the Trig Congress to 37 members, how would the number of representatives change?

Unit Test (continued, page 4)

.....

5. The train ride at the zoo covers a distance of $2\frac{1}{2}$ miles in $\frac{1}{3}$ of an hour.

a. How many miles per hour does the train go? Show your work.

b. How far can the train travel in 3 hours? Show your work.

6. Olivia goes to Larry's Lunch Place. She orders food that totals to \$16.85. The following things change how much she will spend. What will be the final amount that she will spend? Show your work.

First: Because Olivia works at Larry's Lunch Place, she gets a 15% discount on the cost of her food.

Next: She has to pay a 6% sales tax on the discounted amount.

Then: She plans to leave a 20% tip for the servers.

7. Evert is a server at Larry's Lunch Place. A customer left Evert a \$4.50 tip, which was 20% of the cost of the meal. How much did the meal cost? Show your work.