Name_____   Date _____

Mr. Tallman

Do Now

State if the following graphs are proportional or not proportional.

1)

Height of Candle (inches)
Number of Hours

2)

British Pounds
U.S. Dollars
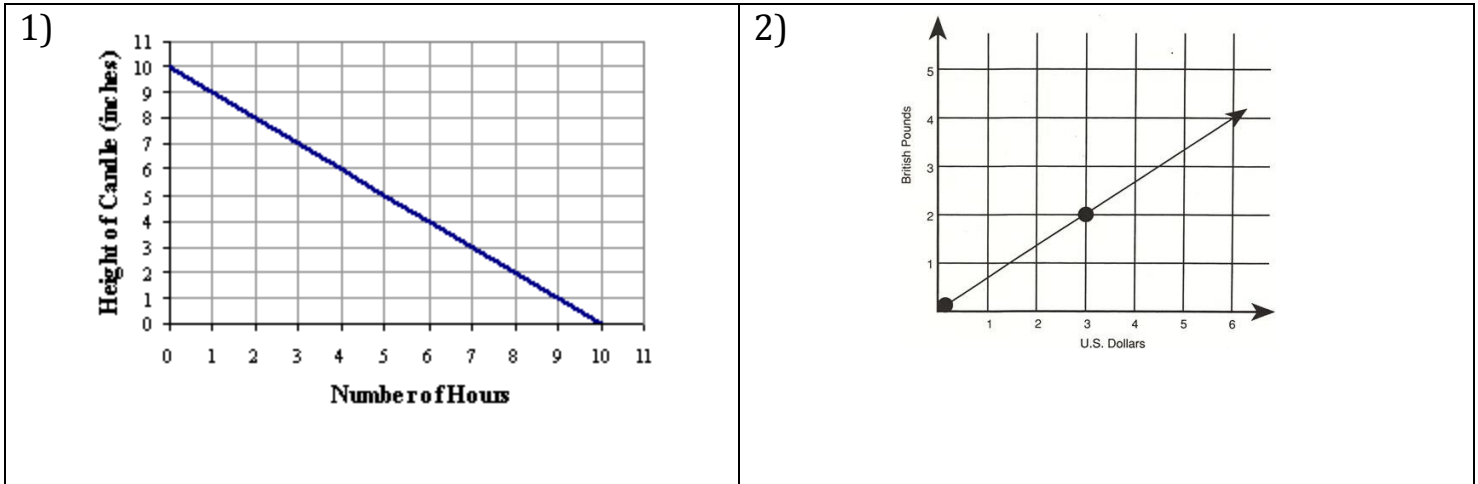
3) Graph the relationship shown in the table below and state if the graph if proportional or not proportional. Explain why or why not.

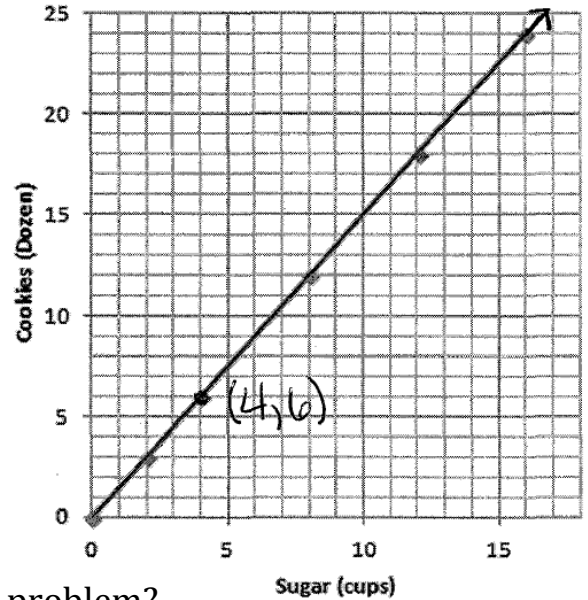| Time (min.)	Distance (ft.)
0	0
2	6
4	12
6	18
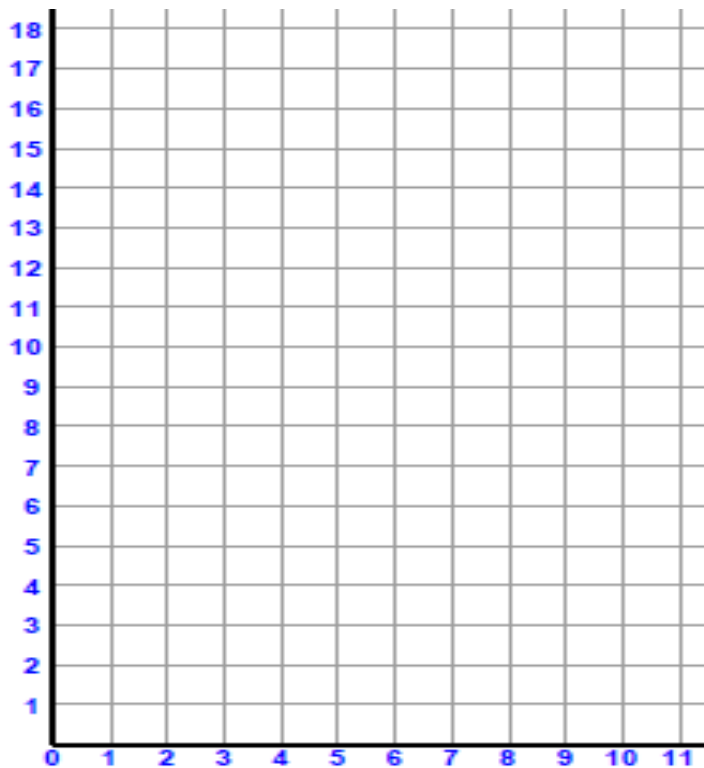
Name_____   Date _____

Mr. Tallman

Lesson #29 – Unit Rate From Graphs

Below is a graph modeling the amount of sugar required to make Grandma's Chocolate-Chip cookies.

1) Is the amount of cookies proportional to the

number of cups of sugar? Explain.

_____

_____

_____

2) What is the constant of proportionality (k)?

3) What does the unit rate mean in the context of the problem?

_____

Unit Rate from a graph

What are the coordinates that would represent the unit rate? (_____, _____)

Sum it up!

The point (_____, k), where k is the unit rate, will always be on the graph of two quantities that are proportional to each other.
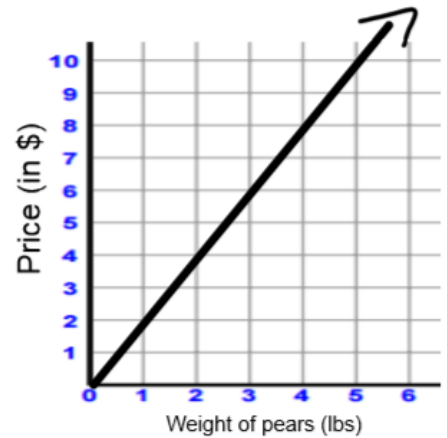
Think about it!

Determine what the point (10, 15) means in the context of the problem above.

Determine what the point (14, 21) means in the context of the problem above.

Example 2) The graph shows the cost of buying pears at a farm stand.

A) Is the price in weight proportional to the price? Explain

_____

_____

B) Identify the constant of proportionality.

Graph: Price (in $) vs Weight of pears (lbs)

C) What are the coordinates of the unit rate? _____

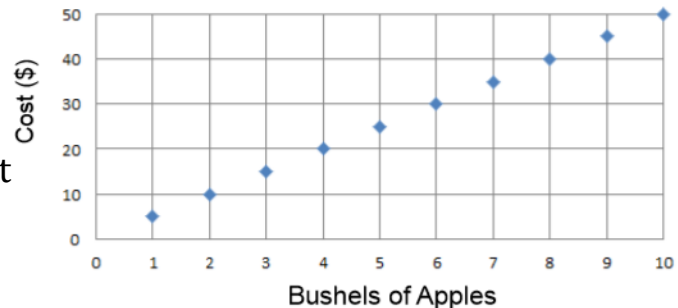D) What does the unit rate mean in the context of the problem?

_____

E) Write an equation (y = kx) of the relationship above. _____

F) What do the coordinates (4, 8) represent in the context of the problem?

_____

3) The graph below shows Bertha's Apple Farm prices.

A) What are the coordinates of the unit rate?

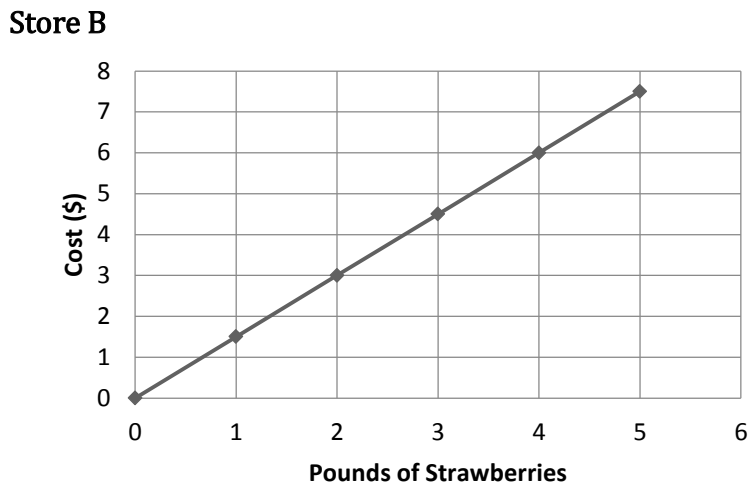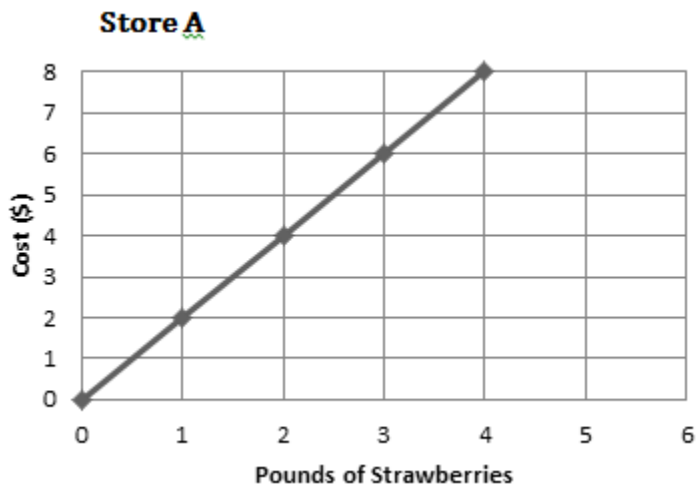*Graph: Cost ($) vs Bushels of Apples*

B) What does the unit rate mean in the context

Of the problem?

C) Write an equation to represent the proportional relationship.

D) If you wanted to buy 80 bushels of apples, how much money would it cost?

4) Two stores are selling strawberries for a certain price per pound. The graph below represents the price per pound of both stores.

Store A

Store B

By looking at the graphs, which store *appears* to be selling strawberries at a higher cost per pound? Why?

What is the rate at which Store A sells strawberries?

What is the rate at which Store B sells strawberries?

Which store sells strawberries at a higher cost per pound?