Your "**Comparing Proportional Relationships**" poster must include:

❏ Create a title that represents the context you were assigned.

❏ Answer each question in complete sentences. Make sure you answer all parts!

❏ Use multiple representations to justify your answers. (for example, use a graph for part a and a table in part b)

   ❏ Any graph you make should have labels on the axes.

   ❏ Tables should have header columns that describe the data in that column

   ❏ Any equations used should include a description of what each variable represents in the context.

❏ If there's time, add visuals and colors to make your poster more appealing. When using images, remember to cite your source!

Sample Problem:

Store A and Store B charge for pears based on weight in pounds.
Store A's prices can be seen in the table:

Store A

Weight of Pears (pounds)	Cost (dollars)
3	3.87
5	6.45

Store B charges $2.52 for two pounds of pears.

a. Which store charges more for 8 pounds of pears? Explain how you know.
b. What is the rate of change for each situation and what does it mean?
c. If Store A is closer to your house than Store B, which store would you choose to buy $15 worth of pears? Explain or show your reasoning.

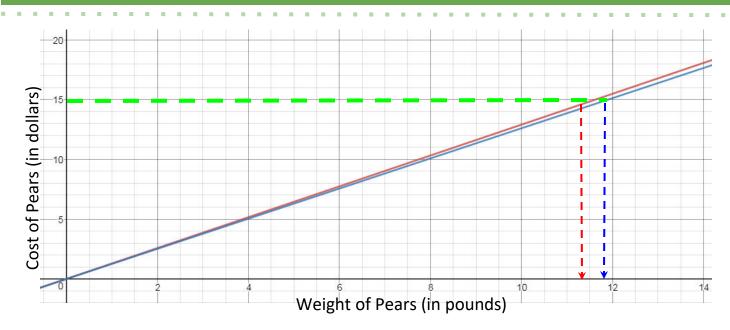# Cost of Pears

created by Ms. Fisher

Store A and Store B each sell pears for different prices per pound.

Store A charges more for 8 pounds of pears than Store B. I wrote an equation to represent each store where *w* is the weight of pears and *C* is the cost.

Store A
C=1.29w
For 8 pounds of pears:
C=1.29(8)
C=10.32
Store A charges $10.32 for 8 pounds of pears.

Store B
C=1.26w
For 8 pounds of pears:
C=1.26(8)
C=10.08
Store B charges $10.08 for 8 pounds of pears.

The rate of change for Store A is 1.29 and for store B is 1.26. In both cases, the rate of change represents the cost for 1 pound of pears.

Store A costs more (so you get fewer pounds of pears for $15-- see the graph. The red line is store A and the blue line is store B). But, it doesn't cost that much more (both are between 11 and 12 pounds and the lines on the graph are close). Since Store A is closer, we would buy $15 worth of pears there.

[Follow this link to create a graph.](#)
You will need to adjust the scaling on the x and y axis, take a screenshot of the finished graph, and then paste it into your poster.
You can add labels to the axes by inserting text boxes.