

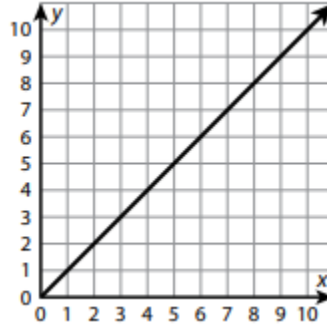
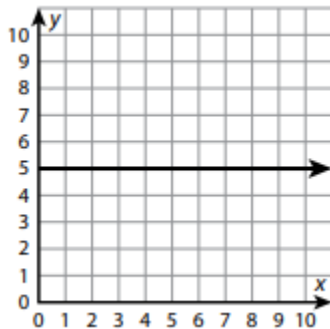
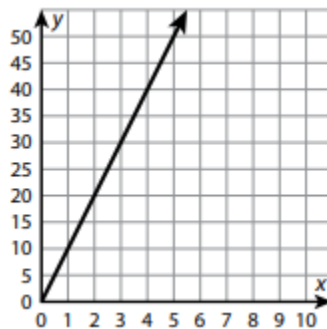
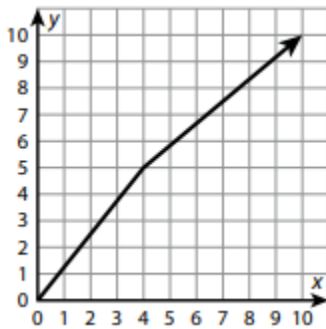
Study Guide to Proportional Relationships Unit

Your Unit Assessment is on December 17 or December 18. Practice These Problems as a Study Guide.

December 14 -- Day 1 Review:

Homework: Khan Academy [Quiz 2](#) -- this counts as HW not a quiz. Due 12/14

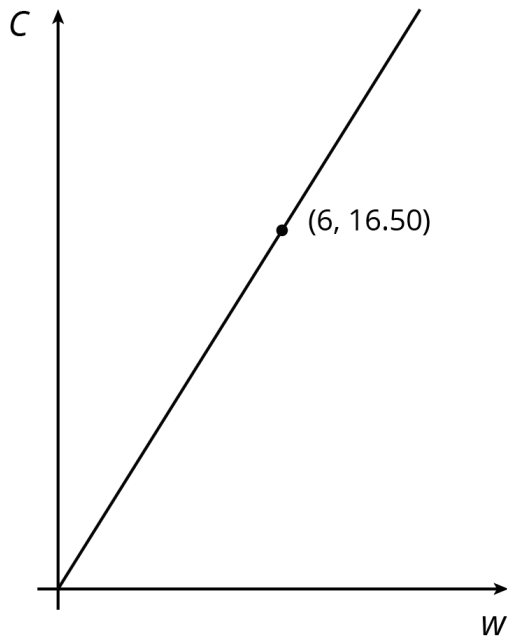
1. Which graph represents a proportional relationship? Explain how you know.



2. Andre rode his bike at a constant speed. He rode 1 mile in 5 minutes.
Which of these equations represents the amount of time t (in minutes) that it takes him to ride a distance of d miles?

- A. $t = 5d$
- B. $t = \frac{1}{5}d$
- C. $t = d + 4$

3. The graph shows the cost C in dollars of w pounds of blueberries, a proportional relationship.



Select **all** the true statements.

- a. 1 pound of blueberries costs \$2.75.
 - b. 2.75 pounds of blueberries cost \$1.
 - c. 5 pounds of blueberries cost \$15.50.
 - d. 12 pounds of blueberries cost \$33.
 - e. The point $(3, 9)$ is on the graph of the proportional relationship.
4. Ted is making trail mix for a party. He mixes $1\frac{1}{2}$ cups of nuts, $\frac{1}{4}$ cup of raisins, and $\frac{1}{4}$ cup of pretzels. How many cups of pretzels does Ted need to make 15 cups of trail mix?

December 15 -- Day 2 Review:

Homework: Khan Academy [Unit test](#) -- This counts as homework not an assessment

1. The table shows the weights of pears at a grocery store.

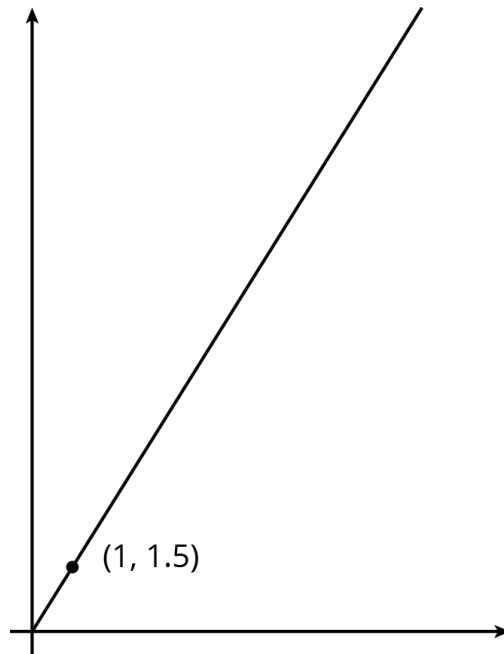
number of pears	weight in kilograms
3	
5	0.75
14	

Complete the table so that there is a proportional relationship between the number of pears and their weight. Write the equation for this situation.

2. The equation $F = \frac{9}{5}C + 32$ relates temperature measured in degrees Celsius, C , to degrees Fahrenheit, F .

Determine whether there is a proportional relationship between C and F . Explain or show your reasoning.

3. A recipe for salad dressing calls for 3 tablespoons of oil for every 2 tablespoons of vinegar. The line represents the relationship between the amount of oil and the amount of vinegar needed to make salad dressing according to this recipe. The point $(1, 1.5)$ is on the line.



- Label the axes appropriately.
 - Write an equation that represents the proportional relationship between oil and vinegar. Indicate the meaning of each variable.
 - Explain the meaning of the point $(1, 1.5)$ in terms of the situation.
4. Molly and Liza are exercising. Molly does 10 push-ups at the same time as Liza does 15 push-ups. When Molly does 40 push-ups, how many push-ups does Liza do?