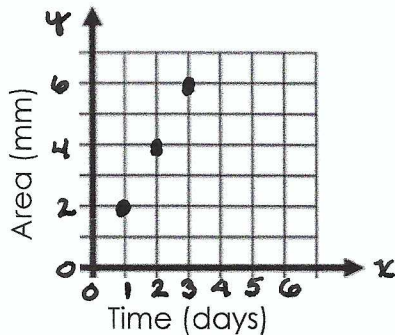


Multiple Representations Mid-Unit Test Review (SWOOP)

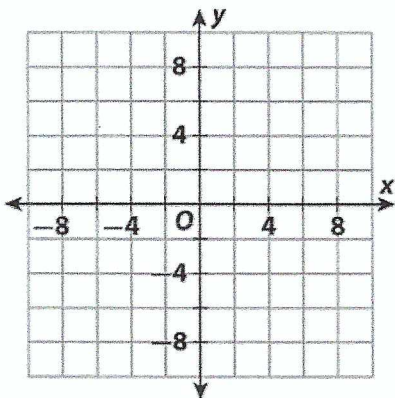
- 1) Irene designs 250 purses during a 5-day work week. Ailin creates one fourth as many purses per week. What is the constant of proportionality between the number of purses and the number of days for Ailin?
- 2) The graph shows the growth of bacteria in a petri dish. How many cm of bacteria should be present after 8 days?



- 3) What is the constant of proportionality between the number of people and the total cost of the party?

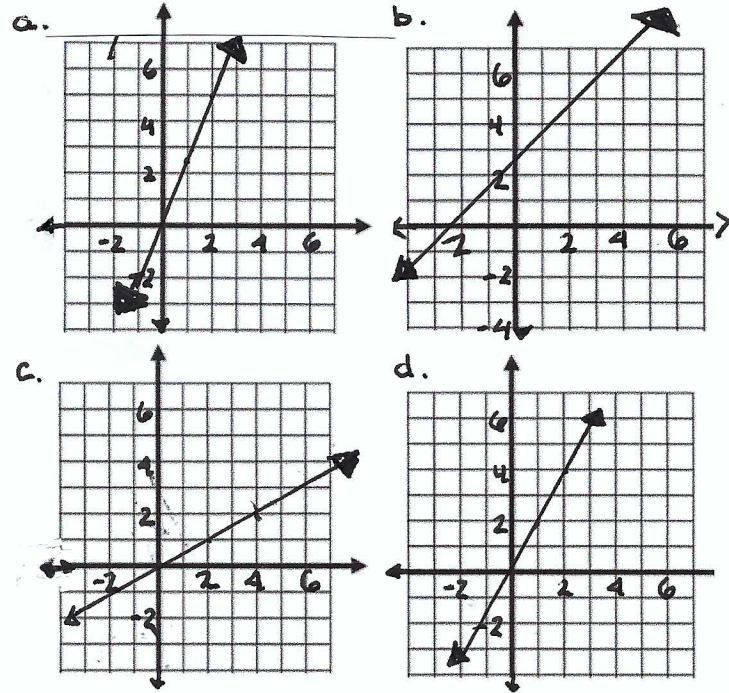
Number of people	Process	Total Cost (\$)
4		\$28
9		\$63
13		\$91

4)



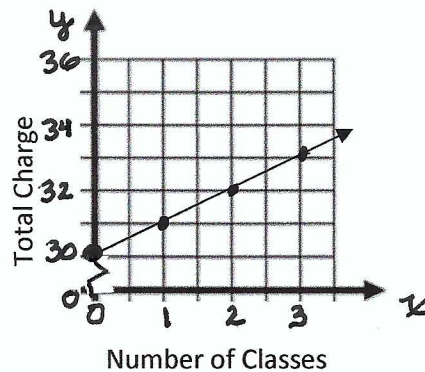
- a. Graph $P(-6, -4)$, $Q(-4, -6)$, & $R(6, -4)$.
- b. In which quadrant are P and Q ?
- c. Graph points at $(6, 6)$, $(6, 0)$, and $(6, 2)$
- d. What do these points have in common with point R ?

- 5) Which graph represents the solutions to the equation? $y = \frac{5}{2}x$



- 6) In a math contest, Vedh earned 10 points for every problem solved correctly and lost 1 point every time he did not label his answers with units of measure. What is his score on the test "t" if he solved 9 questions correctly but forgot to write units on "z" answers? Identify IV and DV. Write the equation.

- 7) The graph shows the charges for a health club in a month. Write an equation that can be used to find the total charge, y , for the number of classes, x .



8) Leo's brother participates in motocross. The race rules state that a 10-second penalty will be added to the cars' race time if there is a false start. If x represents the amount of time, in seconds, it takes to complete the race, which table could represent the effect of the penalty on race times?

a.

Race time (sec)	Race time with a penalty (sec)
45	55
50	65
55	75
60	85

b.

Race time (sec)	Race time with a penalty (sec)
20	200
25	250
30	300
35	350

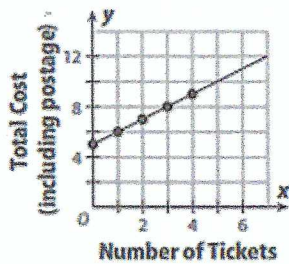
c.

Race time (sec)	Race time with a penalty (sec)
55	45
60	50
65	55
70	60

d.

Race time (sec)	Race time with a penalty (sec)
35	45
40	50
45	55
50	60

9) The graph shows the relationship between the number of tickets Risha is ordering for a raffle and the cost.



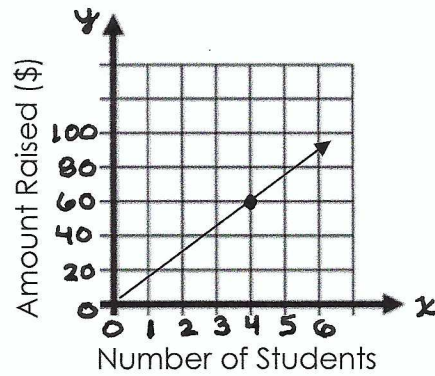
IV: _____
 DV: _____
 Additive or Multiplicative?
 Equation:

10) Aarya plots point C at $(4, -1\frac{1}{2})$. She also plots the point with the opposite y-coordinate and labels the point as D. What is the distance from C to D?

11) Write the equation represented by the data in the table.

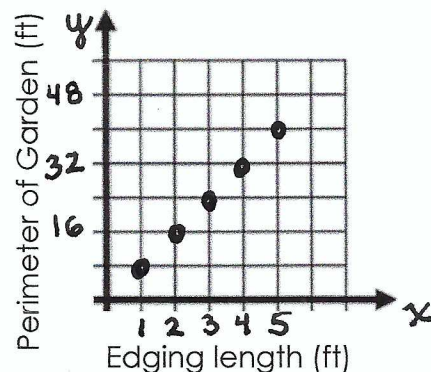
x	20	30	40	50
y	30	45	60	75

12) The graph shows the relationship between the number of students selling tickets and the amount of money raised. Which statement is NOT true?



- The relationship is linear because the graph is a straight line.
- As the number of students selling tickets increases by 1, the amount of money raised increases by \$20.
- As the number of students selling tickets increases by 1, the amount of money raised increases by \$15.
- The relationship is multiplicative.

13) Aditi wants to build a vegetable garden in her yard. She's designing a border around her garden using wooden landscape edging. Each piece of landscape edging needs to be exactly the same length. The graph below represents the lengths of each piece of edging and the total perimeter of her garden.



Using the information in the graph, what shape is the design for Aditi's garden? Write an equation that can be used to determine the perimeter of her garden?