

Name: _____

Complete this review guide to help prepare you for the material and types of questions that will be on the unit test :)

Define each vocabulary term.

dependent variable (y-variable):

independent variable (x-variable):

function:

linear function:

continuous graph:

discrete graph:

domain:

range:

Write a function rule to represent each situation.

y is 5 more than the product of 4 and x

Your total cost C for hiring a garden designer is \$200 for an initial consultation plus \$45 for each hour h the designer spends drawing plans. If the designer spends 10 hours working, how much will it cost?

Using the table, determine whether the relationship is a linear function. Identify the X and Y variables. Then represent the relationship using words and an equation.

Number of Chairs Painted, p	Paint Left (oz), L
0	128
1	98
2	68
3	38

X Variable:

Y Variable:

Words:

Equation:

Use a mapping diagram to determine whether each relation is a function

$\{(-2,5), (8,6), (3,12), (5,6)\}$

Function? Yes or No

$\{(9,6), (3,8), (4,9.5), (9,2)\}$

Function? Yes or No

The domain of $t(x) = -1.5x + 4$ is $\{1, 2, 3, 4\}$. What is the range? (remember to write the values in increasing order)?

x	$t(x) = -1.5x + 4$	$(x, t(x))$
1		
2		
3		
4		

The range of the function is { }

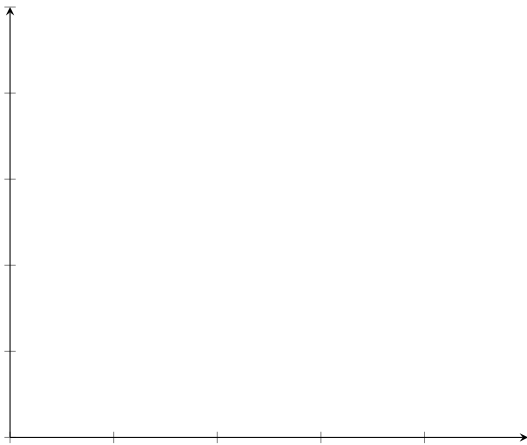
Evaluate each function for $x = 2$.

$$f(x) = 9 + 3(x - 1)$$

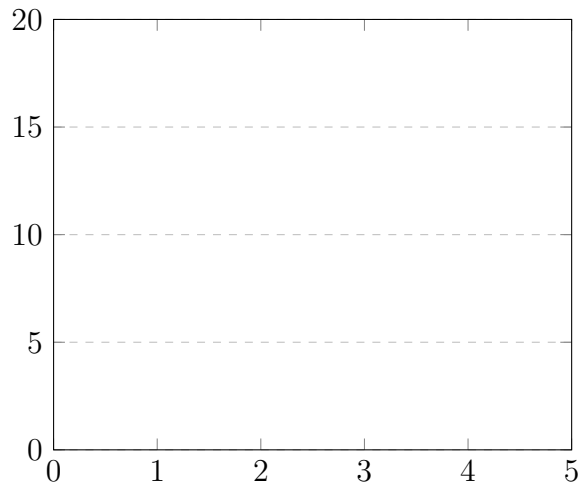
$$h(x) = 8 + 7(x - 1)$$

Sketch a graph to represent the situation. Label your axes.

Your distance from home starting when you leave for school and until when you get home after being at school all day.

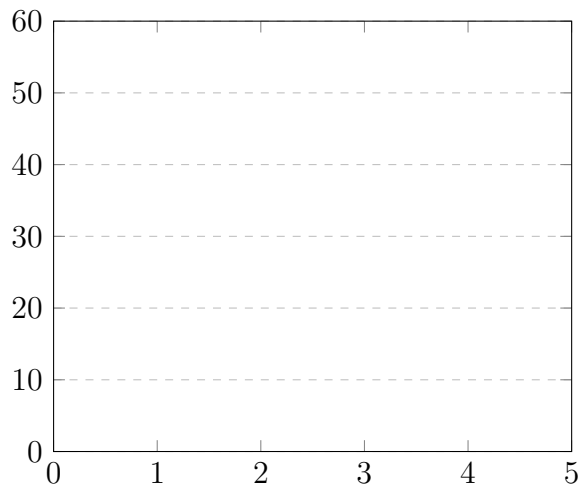


Graph the function rule and label your axes. Explain why the graph is continuous or discrete. The amount of water w in a swimming pool, in gallons, depends on the amount of time t , in minutes, the swimming pool has been filling, as related by the function rule $w = 3t$.



The graph is _____ because _____

The cost C , in dollars, for delivered pizza depends on the number p of pizzas ordered. This situation is represented by the function rule $C = 5 + 9p$.



The graph is _____ because _____