



Objective: Graphing Functions Over a Specific Domain

Homework FN3– NYA p.266 #1, 2, 5, 12 – 14, 22, 25

Do Now: Let $f(x) = 3x^2$

1. $f(4) =$	2. $f(k) =$	3. $f(-4) =$
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Exam Prep: Which value falls outside the range of $y = 3x^2$.

- A) 12 B) 10 C) 0 D) -3

Make sure your graphs are accurate always!
Got your arrowheads? Have you used slope? y-intercepts?
Don't forget you can always make a table and connect the dots!

Graphing Over A Specific Domain

$f(x) = \frac{1}{2}x + 3$

Graph the function for all real numbers over the domain interval $3 \leq x \leq 11$.

What is the range?

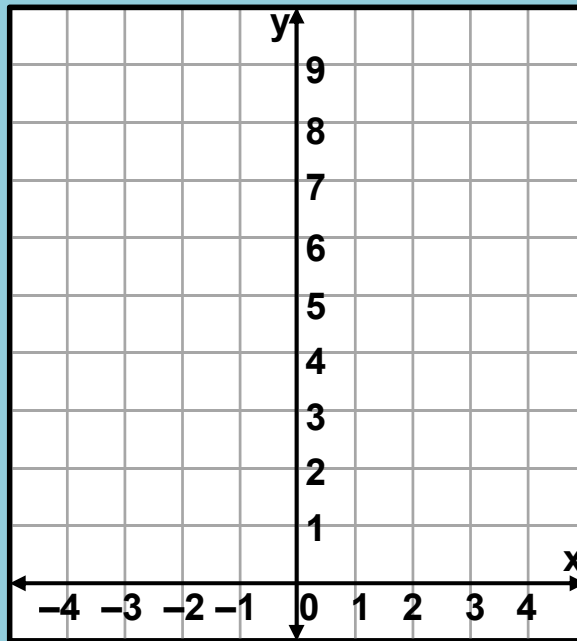
x	y
3	
4	
5	
6	
7	
8	
9	
10	
11	

Graphing Over A Specific Domain

$$f(x) = x^2 + 1$$

Graph the function for all real numbers over the domain interval $-2 \leq x \leq 3$.

What is the range?



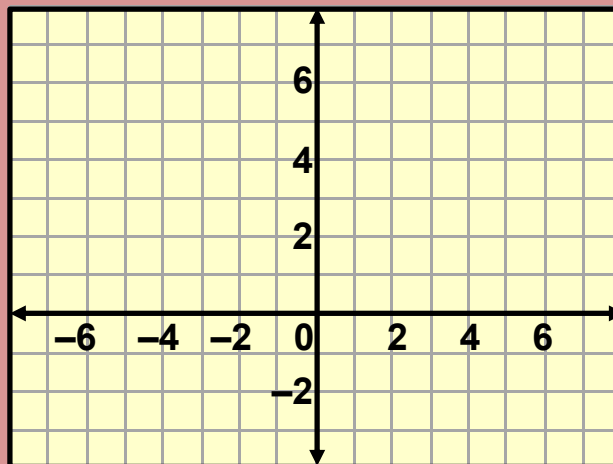
x	y
-2	
-1	
0	
1	
2	
3	

Graphing Over A Specific Domain

$$g(x) = |x + 3| - 2$$

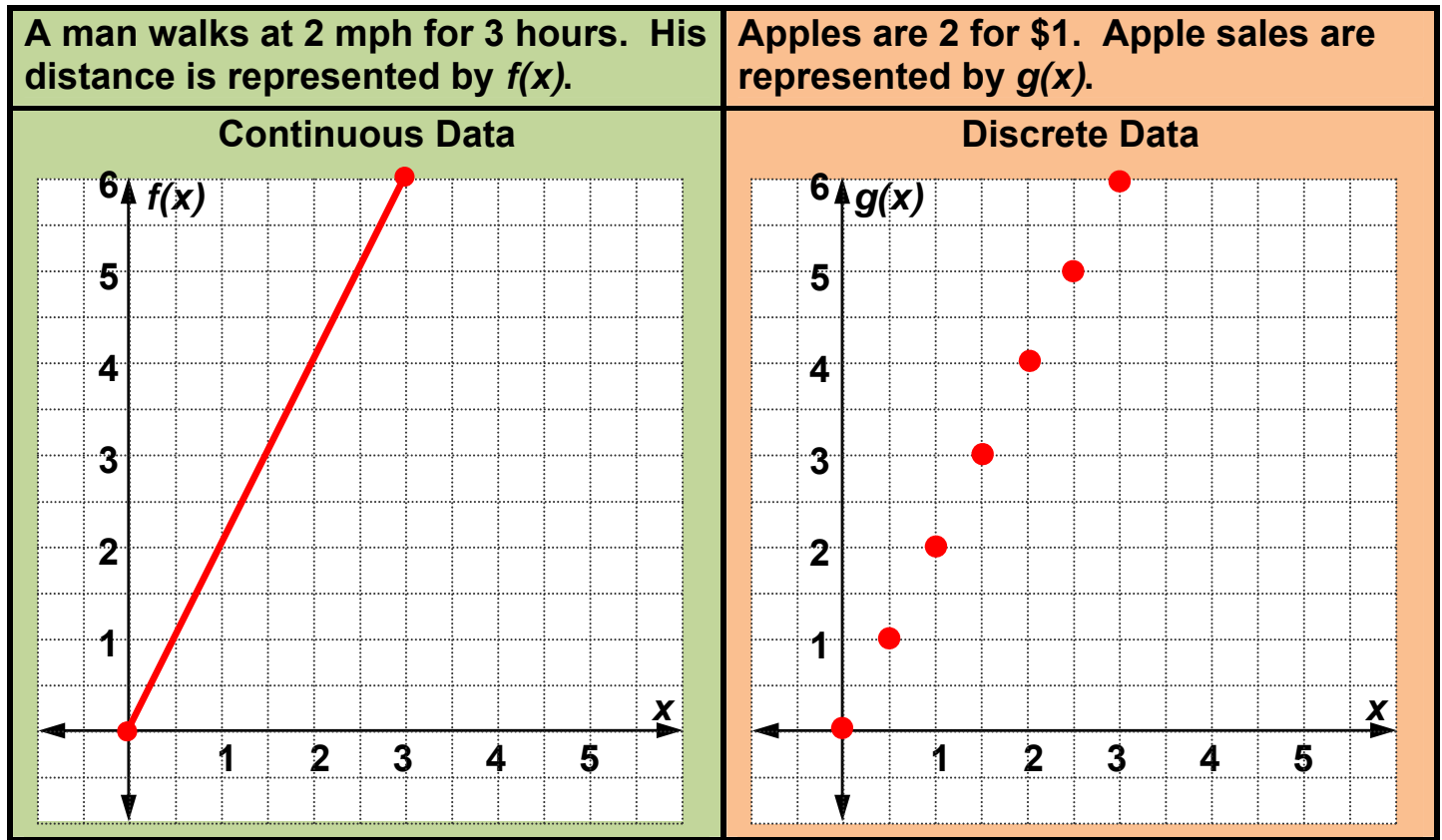
Graph the function for all real numbers over the domain interval $-6 \leq x \leq 3$.

What is the range?



x	y
-6	
-5	
-4	
-3	
-2	
-1	
0	
1	
2	
3	

Continuous data are data where numbers in between any two values also have meaning. The opposite of continuous data is discrete data. Each discrete data item is represented by just a point.



In the discrete example you can buy 1 or more apples, but NOT fractions of an apple. This makes it a discrete data set. A man CAN walk 1.25 hours and say he travelled 2.5 miles, hence a continuous data set.

Find the Domain and Range of the Function from the Graph

