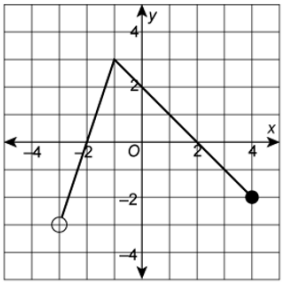
1-1, 1-2, and 1-4 Review Circuit Name_____

#__1__ Answer: 105

Identify the domain of the function:



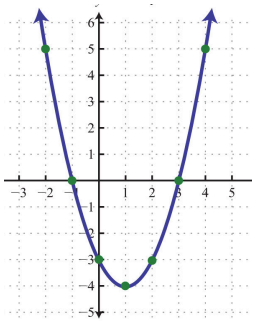
#____ Answer: (-3, 3]

What are the next 3 terms of the sequence?

93, 99, 105, 111, …

#____ Answer: 2, -5, -12, -19

Identify the interval(s) where the function is positive.



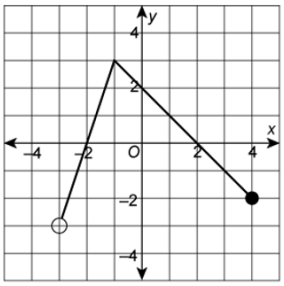
#____ Answer: $f(x) = -(x-3)^2 + 11$

Find the sum of the following sigma notations series.

$$\sum_{n=1}^{12} (5n - 4)$$

#____ Answer: $a_n = -11 - 7(n-1)$

Identify interval(s) where the graph is positive:



#____ Answer: $(-\infty, -1)$ and $(3, \infty)$

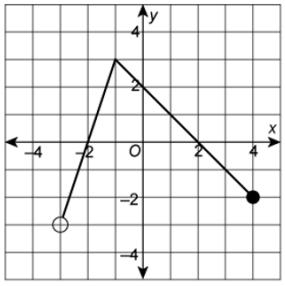
In a theater there are 9 chairs in the first row, each row has 3 more chairs than the previous row, and there are 15 rows. How many chairs are there in the theater?

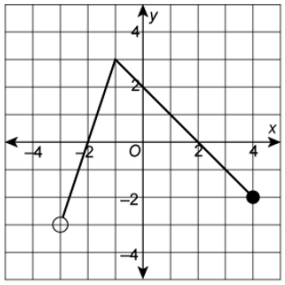
#____ Answer: (-3, -2) and (2, 4)

Identify the translations of the parent function $f(x) = |x|$ that give $g(x) = |x + 3| + 2$.

#____ Answer: -3

Identify the range of the function:



#____ Answer: y-axis reflection What is the common difference for the sequence? 19, 16, 13, 10, …	#____ Answer: 450 In a classroom there are 3 desks in the first row, each row has 4 more desks than the previous row, and there are 7 rows. How many chairs are there in the classroom?
#____ Answer: 117, 123, 129 Identify the translations of the parent function $f(x) = x^2$ that give: $$f(x) = (x + 5)^2 - 9$$	#____ Answer: left 3, up 2 Write the first four terms of the sequence defined by: $$a_n = 2 - 7(n - 1)$$
#____ Answer: (-2, 2) Write a function that performs the following transformation to the parent function $f(x) = x^2$. *Reflection over the x-axis, shifts up 11 and right 3*	#____ Answer: 342 Identify interval(s) where the graph is negative: 
#____ Answer: left 5, down 9 Write the explicit formula for the sequence: -11, -18, -25, -32, …	#____ Answer: (-3, 4] Given f(x) = |x|, what type of transformation occurs to get from f(x) to g(x) = |-x|