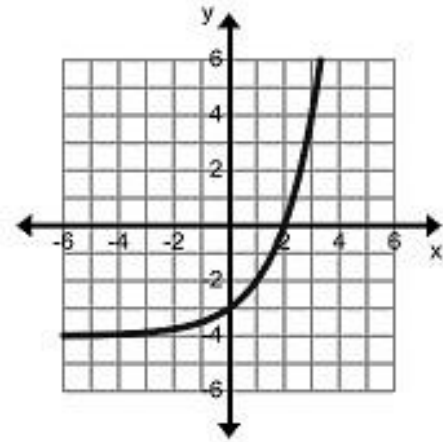Name _____Due Date _____ Period _____
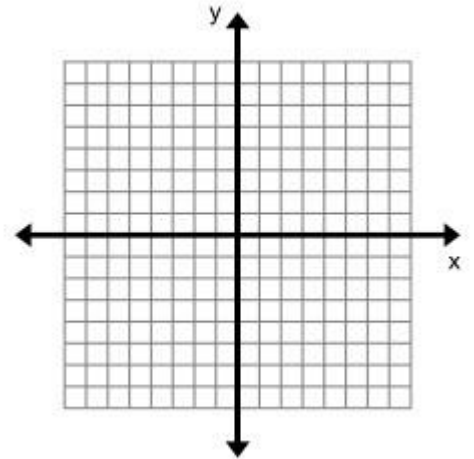
10.1 Average Rate of Change Practice

1. What is the average rate of change for the function to the right between x=1 and x=3?

2. What is the average rate of change for the function to the right between x=0 to x=2?

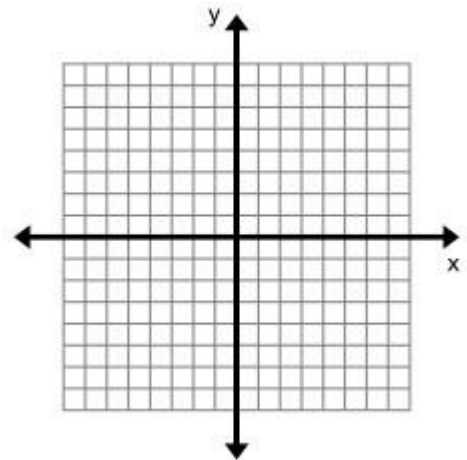3. Complete the following table and plot the points on the coordinate plane.

x	$f(x) = 3^x$
-2	
-1	
0	
1	
2	
3	

What is the average rate of change between x=-2 and x=3?

4. Complete the following table and plot the points on the coordinate plane.

x	$f(x) = 2^x$
-2	
-1	
0	
1	
2	
3	

What is the average rate of change between x=-2 and x=3?

5. Given the function $f(x) = 2^x - 2$ what is the exponential rate?

6. Given the function $f(x) = 2^x - 2$ find the average rate of change from x=0 to x=2.

7. Given the function $f(x) = 6x + 2$ find the average rate of change from x=-5 to x=12.

8. Given the function $f(x) = 3^x - 5$ find the average rate of change from x=-1 to x=3

9. The graph represents how long it takes for a skydiver to reach the ground.

Elevation vs. Time for Skydiver
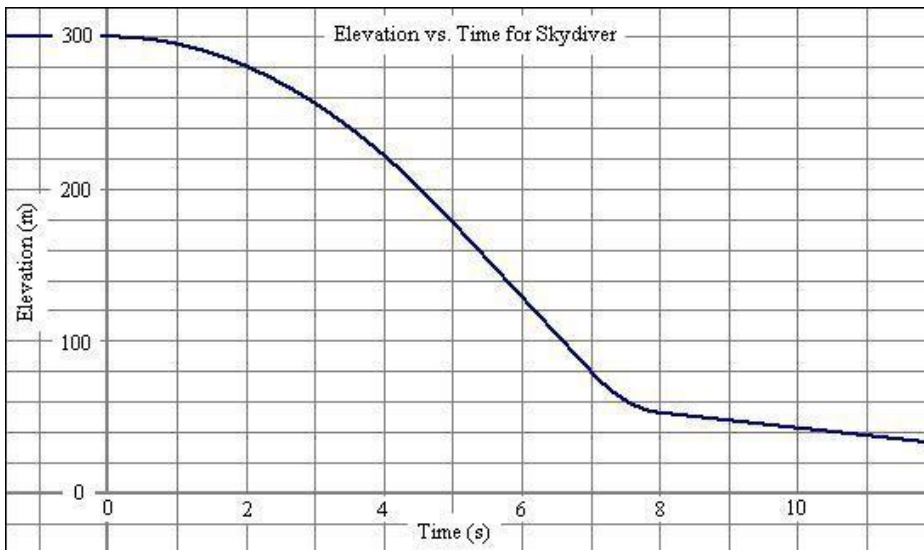
What is the average rate of change for the interval 0 seconds to 6 seconds?

What is the average rate of change for the interval 7 seconds to 11 seconds?

10. The table below shows the percentage of adults in the U.S. who have a cell phone. Find the average rate of change from 2007 to 2011 and interpret its meaning.

Years since 2007	0	1	2	3	4
% adults who have cell phones	77	81	86	89	92