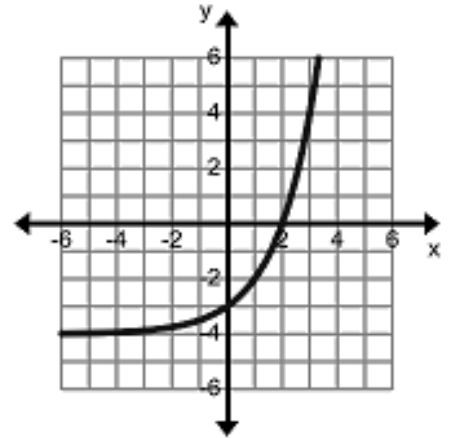


9.2 Average Rate of Change Practice

1. What is the exponential rate?

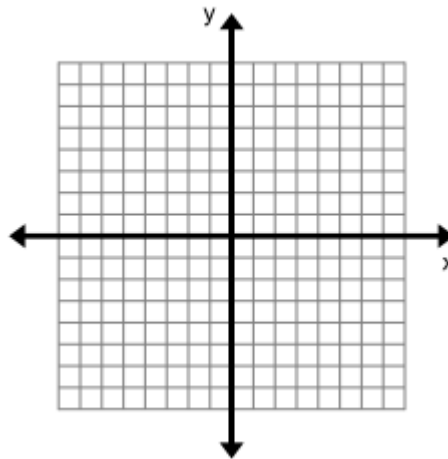
2. What is the average rate of change for the function to the right between $x=1$ and $x=3$?

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



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

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

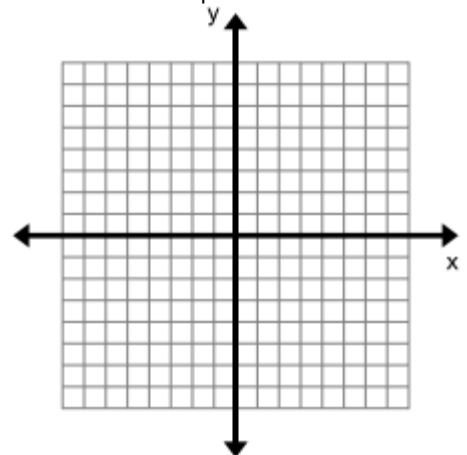


What is the exponential rate?

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

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

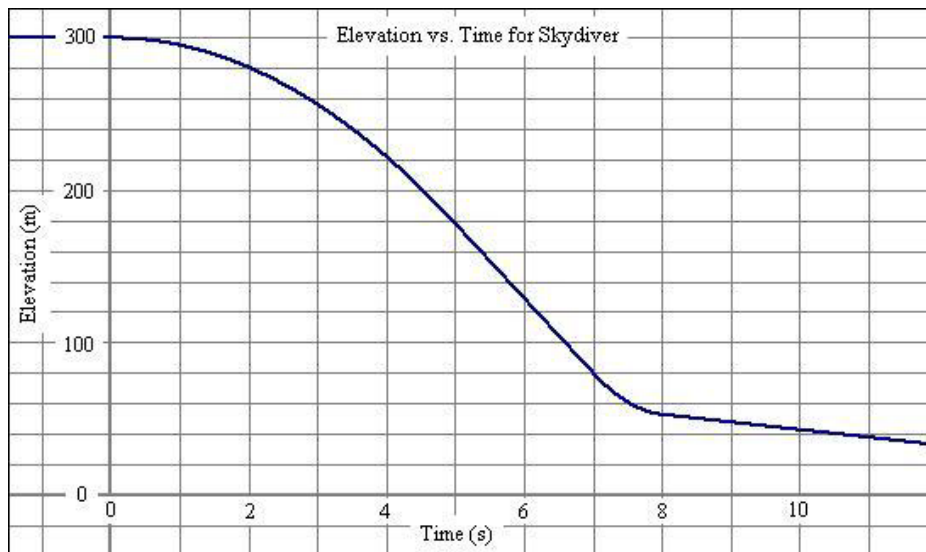
x	$f(x) = 2^x$
-2	
-1	
0	
1	
2	
3	



What is the exponential rate?

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

6. Given the function $f(x) = 2^x - 2$ what is the exponential rate?
7. Given the function $f(x) = 2^x - 2$ find the average rate of change from $x=0$ to $x=2$.
8. Given the function $f(x) = 6x + 2$ find the average rate of change from $x=-5$ to $x=12$.
9. Given the function $f(x) = 3^x - 5$ find the average rate of change from $x=-1$ to $x=3$
10. The graph represents how long it takes for a skydiver to reach the ground.



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?

11. 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 phone	77	81	86	89	92