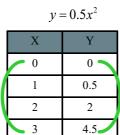
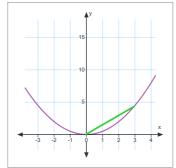
Sec 2.3

IRC by graphing

For ARC, we called the line that joined any 2 points on a function the SECANT

The slope of the secant is the ARC between those 2 points.



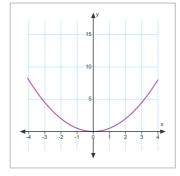


Sep 24-1:08 PM

But, IRC is found for a single point.

$$y = 0.5x^2$$

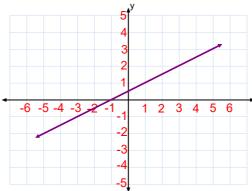
X	Y
0	0
1	0.5
2	2
3	4.5



So, what do I draw for IRC at x=2?

Defⁿ page TANGENT

Quick review of how to find slope from a graphed line....



Sep 24-1:18 PM

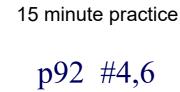
The slope of a tangent cannot be found directly because only *one* point is known.

To find the slope of the tangent:

1/ Graph the function carefully, draw on an accurate tangent line, calculate the slope of the line.

or

2/ Find the slope of a series of secant lines that pass through the fixed point of tangency and points that get closer and closer to the point of tangency.



Sep 24-1:22 PM