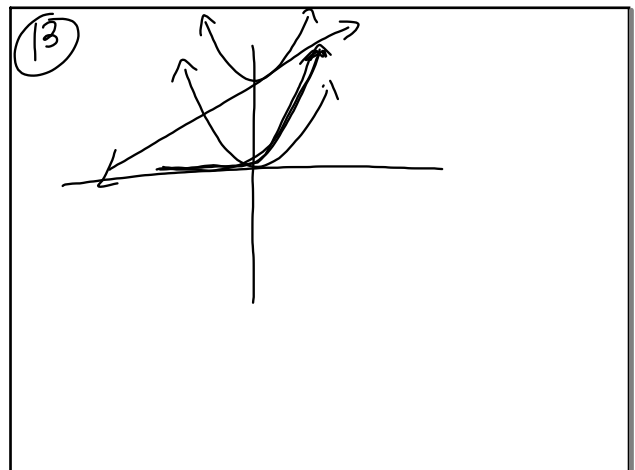


Calendar Math Review Questions  
 Calendar Math Quiz  
 New Calendar Math  
 4.1 Average Rate of Change

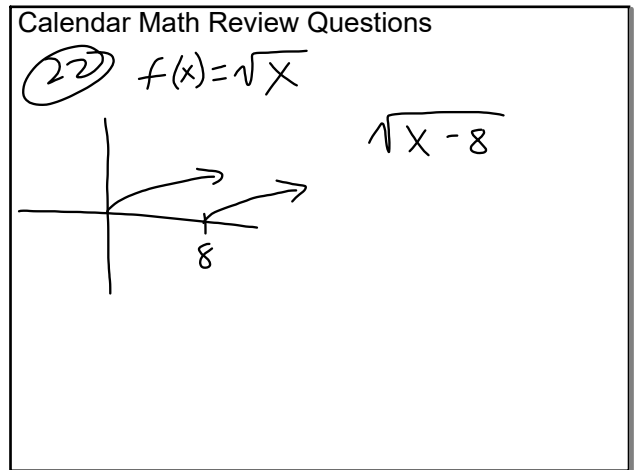
Nov 3-5:30 PM



Nov 4-8:36 AM

19)  $y = \sqrt[3]{x}$   
 $f(x) = 6\sqrt[3]{x}$   
 vertical stretch 6

Nov 4-8:37 AM



Nov 3-5:44 PM

New Calendar Math

Nov 3-5:45 PM

4.1 Average Rate of Change

• is the slope of a line  
 - difference between two points.

$f(-1) = 9$        $f(3) = 29$   
 $\begin{matrix} x \\ -1 \\ x_1 \end{matrix}$        $\begin{matrix} y \\ 9 \\ y_1 \end{matrix}$        $\begin{matrix} x \\ 3 \\ x_2 \end{matrix}$        $\begin{matrix} y \\ 29 \\ y_2 \end{matrix}$

$m = \left( \frac{y_2 - y_1}{x_2 - x_1} \right)$

$m = \left( \frac{29 - 9}{3 - (-1)} \right) = \left( \frac{29 - 9}{3 + 1} \right) = \frac{20}{4} = 5$

Nov 3-5:45 PM

-2	12
-1	3
0	0
1	3
2	12
3	27
4	48

$a. [-2, 0]$   
 $(-2, 12) (0, 0)$   
 $x^1 y^1 \quad x^2 y^2$

$$m = \left( \frac{0 - 12}{0 - (-2)} \right)$$

$$= \frac{-12}{2} = -6$$

b)  $[1, 4] = 15$   
 $(1, 3) (4, 48)$   
 $x^1 y^1 \quad x^2 y^2$

c)  $[2, 3]$   
 $(2, 12) (3, 27)$   
 $x^1 y^1 \quad x^2 y^2$

$$m = \frac{27 - 12}{3 - 2} = \frac{15}{1} = 15$$

Nov 4-9:14 AM

ex 3

a.  $f(-4) = 2$   
 b.  $f(-3) = -3$   
 c.  $f(-2) = -6$   
 d.  $f(1) = -6$   
 e.  $f(2) = 2$

a.  $[-4, -2]$   
 $(-4, 2) (-2, -6)$   
 $x^1 y^1 \quad x^2 y^2$

$$m = \left( \frac{-6 - 2}{-2 - (-4)} \right) = \frac{-8}{2} = -4$$

b: 0  
c: 2

Nov 4-9:20 AM