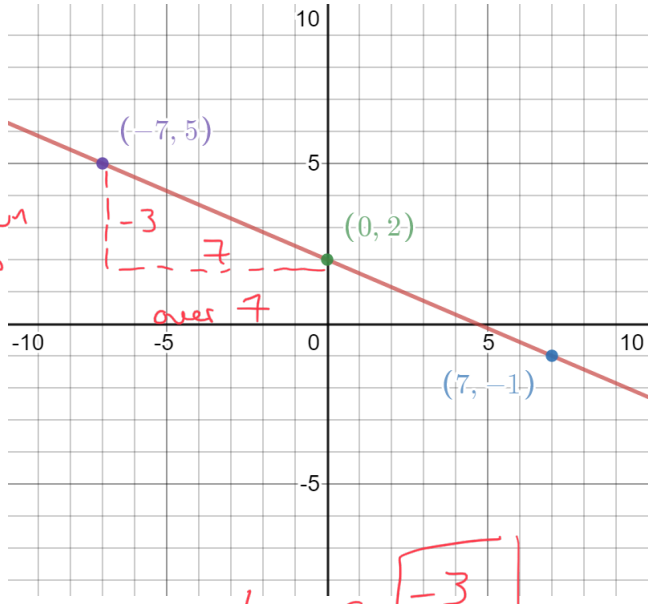
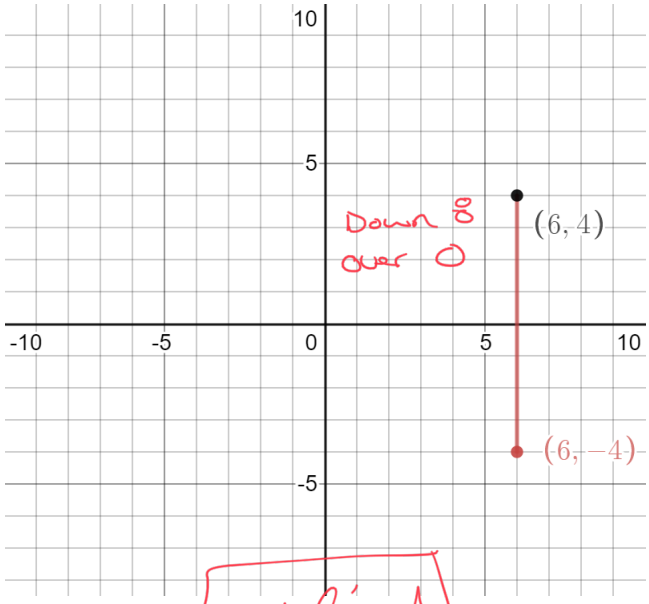
Section 2 – Final Practice – Check-In

What is the slope of the following lines below?





What is the slope of the line that goes through the following points?

3. $(3, -4)$ *and* $(7, -3)$

pt 1, pt 2

$\frac{y_2 - y_1}{x_2 - x_1}$

$\frac{-3-(-4)}{7-3} = \frac{-3+4}{4} = \frac{1}{4}$

4. $(3, 8)$ *and* $(9, -1)$

pt 1, pt 2

$\frac{-1-8}{9-3} = \frac{-9}{6} = \frac{-3}{2}$

5. $(1, 5)$ *and* $(2, 5)$

pt 1, pt 2

$\frac{5-5}{2-1} = \frac{0}{1} = 0$

6. $(13, -6)$ *and* $(5, -3)$

$\frac{-3-(-6)}{5-13} = \frac{-3+6}{-8} = \frac{3}{-8}$

$-\frac{3}{8}$

7. Earth rotates at about $465m/sec$ at the equator. What is it's speed in km/hr?

$$\frac{465\,m}{1\,sec} \cdot \frac{1\,km}{1000\,m} \cdot \frac{60\,secs}{1\,min} \cdot \frac{60\,mins}{1\,hr}$$

$$\frac{465 \cdot 60 \cdot 60}{1000} = \frac{1674000\,km}{1000\,hr} = \boxed{1674\,km/hr}$$

8. Gill is a real estate agent. She sold a house for $\$740\,000$ and 7 $years$ later (now) it sold for $\$995\,500$. What was the average rate of change in the price over the years.

Rate of change $\frac{\$}{yr}$

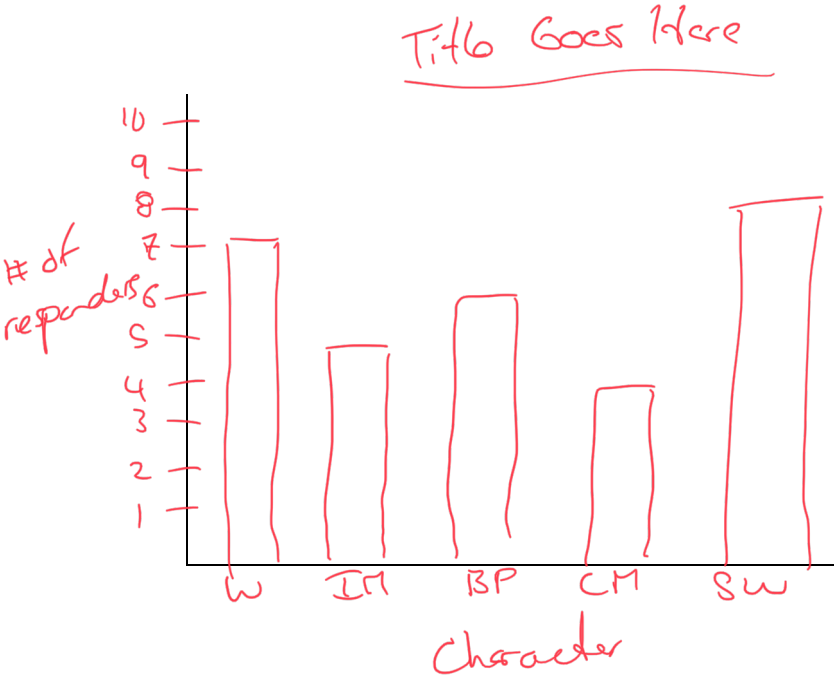
$$\frac{995\,500 - 740\,000}{7 - 0} = \frac{255\,500}{7} = \boxed{\$36\,500/yr}$$

9. If the house in the question above continued to increase in price at the same rate of change, then what would it be worth 5 years from now?

$$995\,500 + \left[\frac{\$36\,500}{1\,yr} \cdot 5\,yr\right]$$

$$995\,500 + 182\,500 = \boxed{\$1\,178\,000}$$

10. Graph the information below in a bar graph. Be sure to have axes titles and a title that explains the information being analyzed. Draw in all the scale markings for the axes.



Favorite Marvel Character	Number of Responders
Wolverine	7
Iron Man	5
Black Panther	6
Captain Marvel	4
Scarlet Witch	8

Reflection:

This Section has been….

I have struggled with….

I have been impressed with my…..