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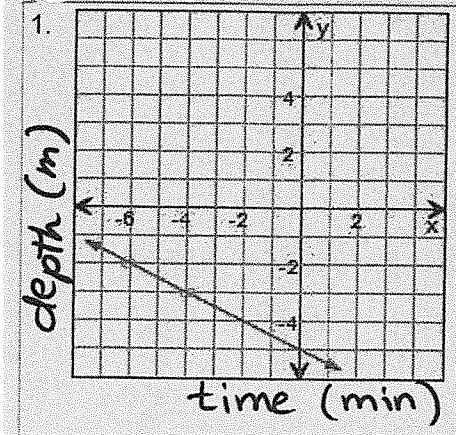
DAY 4 - Slope from Graphs, recording as Rate of Change

Record the slope and use units to write it as a rate of change.

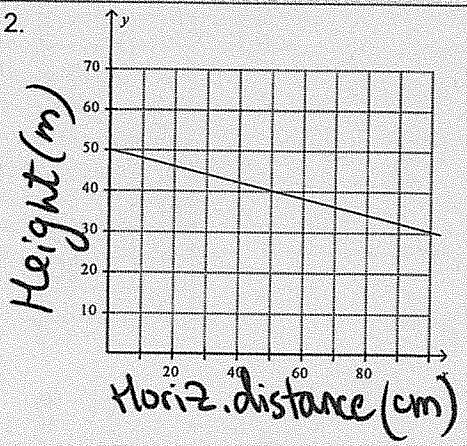
Note: This is just practice, the numbers you'll get will not be realistic

1.



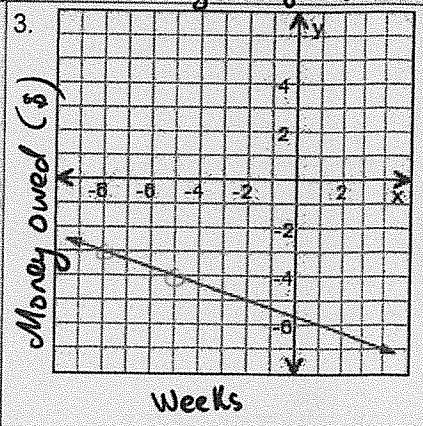
$m = \frac{-1}{2} = -0.5$ m/min

2.



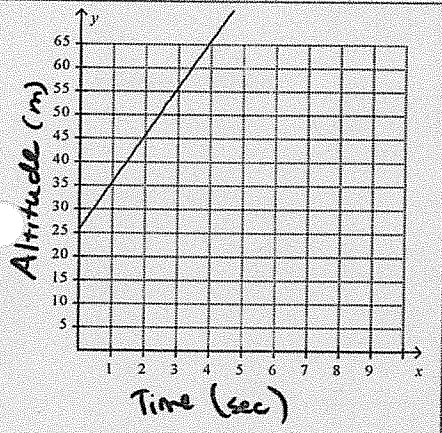
$m = \frac{-10}{50} = -0.2$ m/cm

3.



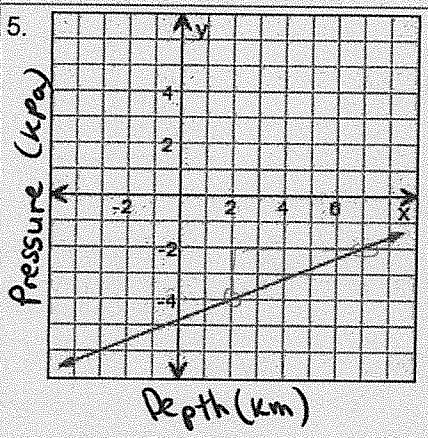
$m = -\frac{1}{3} = -0.33$ $/week

4.



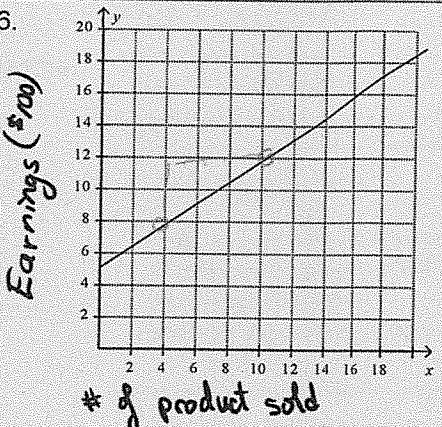
$m = \frac{10}{1} = 10$ m/sec

5.



$m = \frac{2}{5} = 0.4$ kPA/km

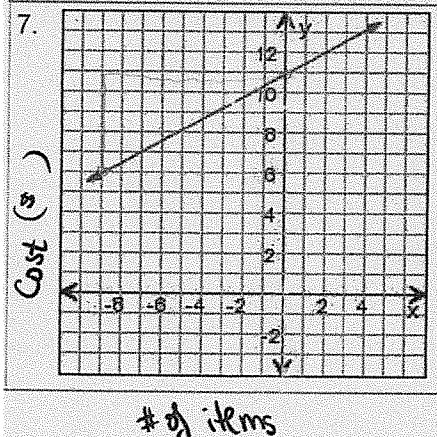
6.



$m = \frac{4}{6} = \frac{2}{3} = 0.666\left(\frac{100}{\text{product}}\right)$

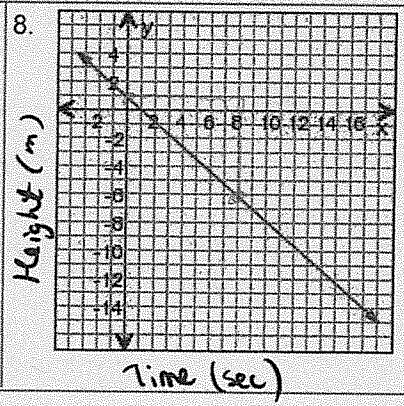
$= \$66.7$/product

7.



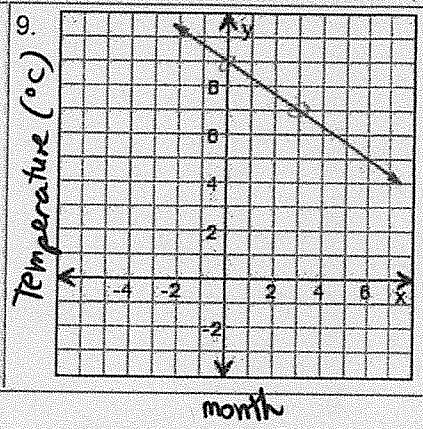
$m = \frac{5}{9} = 0.55$ $/item

8.



$m = \frac{-7}{8} = -0.88$ m/sec

9.



$m = -\frac{2}{3} = -0.66$ °C/month

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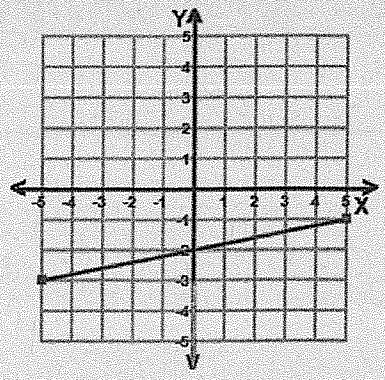
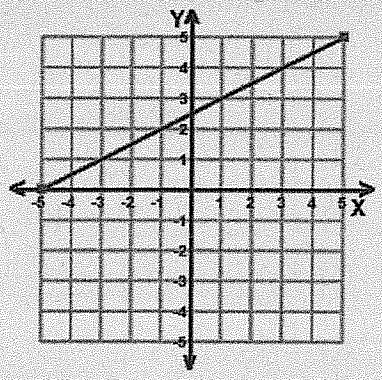
Find the Slope of Each Line

1) 

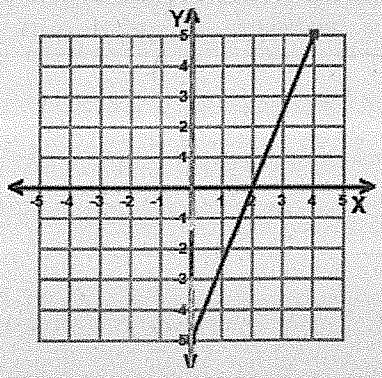
slope = $\frac{1}{5}$

$y = \frac{1}{5}x - 2$

2) 

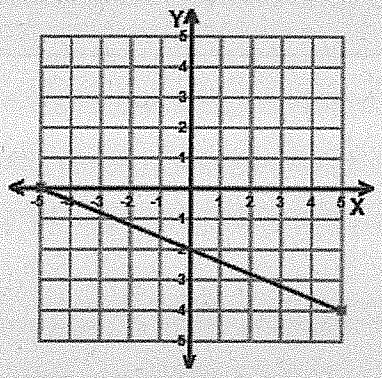
slope = $\frac{1}{2}$

$y = \frac{1}{2}x + 2.5$

3) 

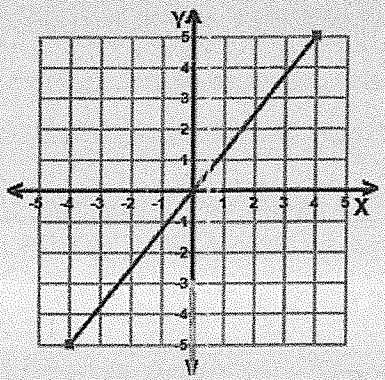
slope = $\frac{5}{2}$

$y = \frac{5}{2}x - 5$

4) 

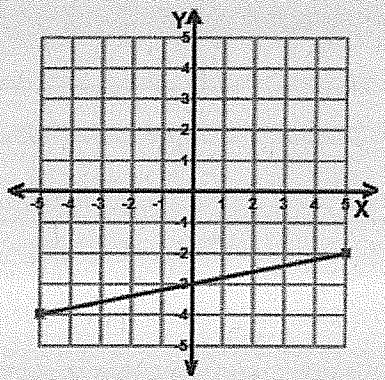
slope = $\frac{-2}{5}$

$y = -\frac{2}{5}x - 2$

5) 

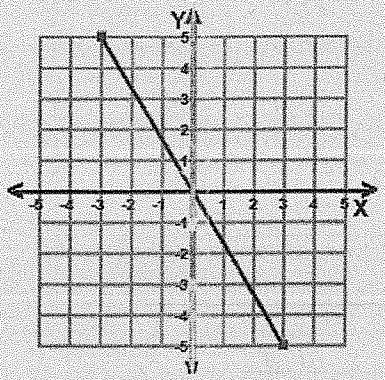
slope = $\frac{5}{4}$

$y = \frac{5}{4}x + 0$

6) 

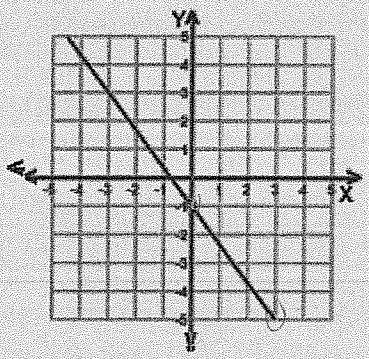
slope = $\frac{1}{5}$

$y = \frac{1}{5}x - 3$

7) 

slope = $-\frac{5}{3}$

$y = -\frac{5}{3}x + 0$

8) 

slope = $\frac{-4}{3}$

$y = -\frac{4}{3}x - 1$

9). For all of the above, add in the y-intercept, then record equation of each line in y=mx+b form

1. $y = \frac{1}{5}x - 2$
2. $y = \frac{1}{2}x + 2.5$
3. $y = \frac{5}{2}x - 5$
4. $y = -\frac{2}{5}x - 2$
5. $y = \frac{5}{4}x + 0$
6. $y = \frac{1}{5}x - 3$