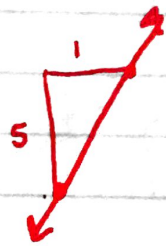


HW #12 pg 196 # 1-12, 16 \* 8,9 hard!

1. Yes, slope is the rate of change of a line.
2. A, it is the steepest
3. It is more difficult to run up a ramp with a slope of 5 because it is steeper!

$$\text{Slope } 5 = \frac{5 \text{ up}}{1 \text{ over}}$$



$$\text{Slope } \frac{1}{5} \text{ up over}$$



4.  $\frac{4}{1} = \textcircled{4}$

5.  $\textcircled{\frac{3}{2}}$

6.  $\textcircled{\frac{1}{3}}$

7.  $\frac{5}{5} = \textcircled{1}$

\* 8.  $\frac{4.5}{6} = \frac{9}{12} = \textcircled{\frac{3}{4}}$

\* 9.  $\frac{4.8}{6} = 0.8 = \textcircled{\frac{4}{5}}$

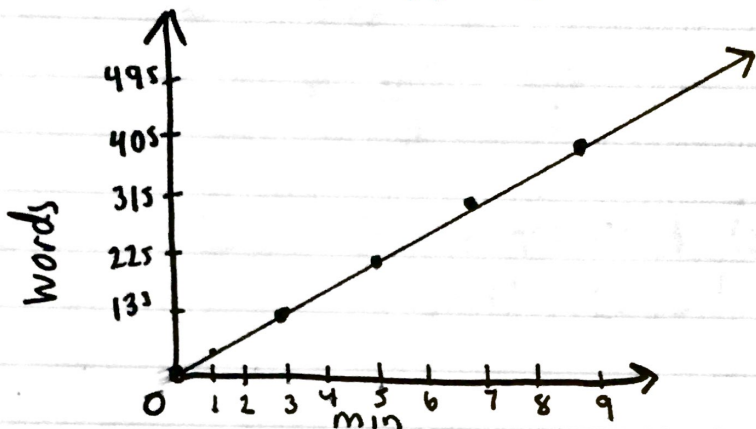
10.

minutes, x	3	5	7	9
words, y	135	225	315	405

$\xrightarrow{+2}$   $\xrightarrow{+2}$   $\xrightarrow{+2}$   
 $\xrightarrow{+90}$   $\xrightarrow{+90}$   $\xrightarrow{+90}$

Slope (rate of change) =  $\frac{90}{2} = \frac{45}{1}$

45 words per minute



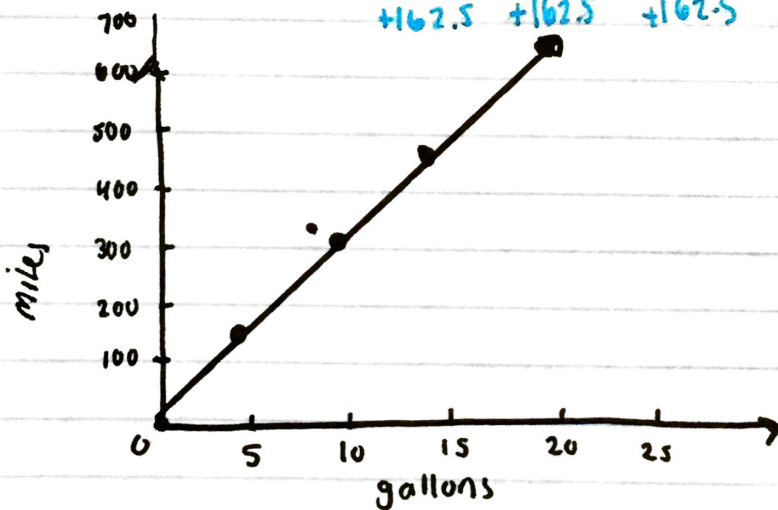
11.

gallons	5	10	15	20
miles	162.5	325	487.5	650

$\xrightarrow{+5}$   $\xrightarrow{+5}$   $\xrightarrow{+5}$   
 $\xrightarrow{+162.5}$   $\xrightarrow{+162.5}$   $\xrightarrow{+162.5}$

Slope (rate of change) =  $\frac{162.5}{5} = \frac{32.5}{1}$

32.5 miles per gallon



12. They did  $\frac{\text{run}}{\text{rise}}$  instead of  $\frac{\text{rise}}{\text{run}} = \frac{5}{4}$

16. a. Your friend's line is steeper so she is saving more money per week.

b. Your friend                      You

$$= \frac{60}{3} = \frac{\$20}{1} \qquad \frac{60}{4} = \frac{\$15}{1}$$

c. Your friend is saving \$5 more per week!

d. \$15 per week  $\rightarrow$  \$165

$$165 \div 15 = \text{11 weeks}$$