

1D "WORD"

NO WORK, NO CREDIT. PENCIL ONLY.

Name _____ Per: _____

1. The amount of money Joe the plumber charges is represented by the equation $C = 65h + 100$.

- Define the two variables. $h =$ _____ $C =$ _____
- What is the slope of the equation? _____ What does the slope represent in the context of the problem? _____
- What is the y-intercept? _____ What does it represent in the story? _____
- If you were to hire Joe and he worked for 11 hours, how much would you owe him? _____
- If Joe said that he made \$620 on a job, how many hours did he work? _____
- Complete the table.

h	C
0	
2	
3	
11	

2. Laura lights a candle. The **height** of the candle is **6"** and **each hour** that it **burns** $\frac{1}{2}$ ".

- What is the slope of the equation representing the height of the candle? _____
- What does the slope represent in the context of the problem? _____
- What is the y-intercept? _____ What does it represent in the story? _____
- Define your dependent variable: _____
- Define your independent variable: _____
- What is the x-intercept? _____ What does it represent in the story? _____
- How many hours will the candle burn before it is gone? _____.
- If the height of the candle is 2.75", how long has the candle burned? _____
- Make a table that fits this situation.

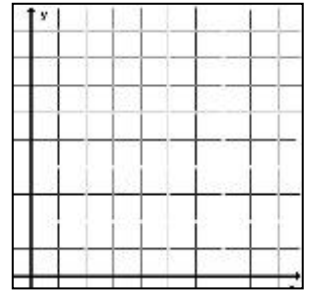
<i>Hours</i>	
	0
0	

3. Barbara joins an on-line movie club for **\$15**. She will **pay \$3 for each movie** that she downloads.

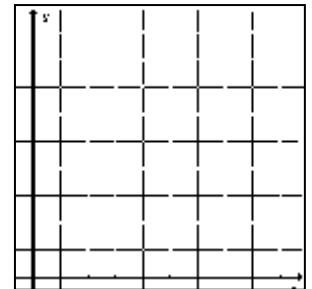
- What is the slope of the equation representing the amount of money Barbara will pay? _____
- What does the slope represent in the context of the problem? _____
- Define your dependent variable: _____
- Define your independent variable: _____
- Write an equation to represent the story _____
- If she downloaded a total of 12 movies, how much would it cost her? _____

4. Ricardo is draining his pool for the winter. There are **240 gallons** in the pool and it is **drains out 60 gallons in 2 hours**.
- What is the slope of the equation representing Ricardo draining his pool? _____
 - What does the slope represent in the context of the problem? _____
 - Define your dependent variable: _____
 - Define your independent variable: _____
 - Write an equation to represent the story _____
 - How many hours will it take him to drain the pool? _____. On a graph, where do you see this? _____
 - How many hours has he been draining the pool if there are 150 gallons left? _____
 - Make a table that fits this situation
 - Graph

(Don't forget to label the axis and scale)



5. Kristina is running the freshman class fundraiser. They are selling VHMS key chains for \$6 each as a fundraiser. The PTA donates \$35 up front.
- What is the slope? _____ What does it represent in the context of the problem? _____
 - What's the y-intercept? _____ What does it represent in the story? _____
 - Define your variables and write an equation to represent the story _____
 - If her goal is to raise \$500, how many key chains must she sell? _____
 - If she sells 58 key chains, how much money will she earn? _____
 - List at least 3 data points that would fit the situation.
 - Describe how to choose the **scale** for your axes for your graph.
 - Graph (label and scale)



Solve the following for "y" and list the slope and y-intercept:

6. $9y = 3x + 1$

7. $20x + 5y - 7 = -2$

8. $2x + 3y + 2x = 8$

Solve: _____

Solve: _____

Solve: _____

Slope: _____

Slope: _____

Slope: _____

y-intercept: _____

y-intercept: _____

y-intercept: _____

x-intercept: _____

x-intercept: _____

x-intercept: _____