$\qquad$

## Homework \#14

Due Friday, February $16^{\text {th }}$

1. Create a table and graph the results for: $y=x+3$

| $\mathbf{X}$ | $\mathbf{Y}$ |
| :---: | :---: |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |


2. Create a table and graph the results for: $y=-2 x$

| $\mathbf{X}$ | $\mathbf{Y}$ |
| :---: | :---: |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |


3. Create a table and graph the results for: $-2 x+6$

| $\mathbf{X}$ | $\mathbf{Y}$ |
| :---: | :---: |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |


$\qquad$
4. Create a table and graph the results for : $\mathrm{y}=\frac{x}{4}+7$

| $\mathbf{X}$ | $\mathbf{Y}$ |
| :---: | :---: |
| -8 |  |
| -4 |  |
| 0 |  |
| 4 |  |
| 8 |  |


5. A local department store has two different payment plans for buying a $\$ 270$ skateboard.

- Plan A: A fixed weekly payment of $\$ 10.80$
- Plan Z: A $\$ 120$ initial payment plus $\$ 6$ per week
a. For each plan, write an equation that represents the payment plan.
b. For each plan, how much money is still owed after 12 weeks.
c. Which plan requires the least amount of weeks to pay for the skateboard? Explain.
$\qquad$
d. Make a table to show the comparison of the two plans. Graph both plans on the graph to the right.

| Week | Plan A | Plan Z |
| :---: | :--- | :--- |
| 0 |  |  |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| 7 |  |  |
| 8 |  |  |
| 9 |  |  |
| 10 |  |  |
| 11 |  |  |
| 12 |  |  |
| 13 |  |  |
| 15 |  |  |
| 14 |  |  |


e. At what point is the skateboard paid off for both payment plans?
6. Find the required information for each of the problems below.

$$
y=1.5 x
$$

Rate of Change:
Y-Intercept:
$Y$ values increasing, decreasing, or staying the same:

$$
y=-2 w+6
$$

## Rate of Change:

Y-Intercept:
$Y$ values increasing, decreasing, or staying the same:
$\qquad$

$$
y=-3 x+10
$$

Rate of Change:
Y-Intercept:
$Y$ values increasing, decreasing, or staying the same:

$$
y=2 x+5
$$

Rate of Change:
Y-Intercept:
Y values increasing, decreasing, or staying the same:

## Spiral Review (Required!)

1.)

| Stem | Leaf |  |  |  |
| :---: | :--- | :--- | :--- | :--- |
| 0 | 1 | 3 | 4 | 4 | $4 \quad 6$

A.) List all the data from least to greatest.
B.) Find the mean of the data set.
C.) Find the mode of the data set.
D.) Find the median of the data set.
E.) Find the range of the data set.
2. ) $\frac{4}{7} \div \frac{3}{8}$
2.) $\frac{2}{7} \times \frac{5}{2}$
3.) $5 x=55$
4.) $-8+9-15$
5.) $6 x=42$
6.) $7 x=28$

