## Algebra 1

## WS PC \#2 Review - Unit 3

1. A company's cost are $\$ 400$ a week and profit $\$ 20$ per item sold. Write a linear equation to represent the total profit per week if the companies sold x items.
2. Draw a scatter plot for the age and tail length of some tadpoles.

| Ages (days) | 5 | 2 | 9 | 7 | 12 | 10 | 3 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tail (mm) | 14 | 15 | 3 | 8 | 1 | 3 | 12 | 9 |

a. Draw a line of best fit.
b. Using your GDC, write the equation of your line of best fit.
c. Describe the correlation.
d. Using your GDC, determine your correlation coefficient.

e. Interpret the point $(8,10)$ for this situation.
f. What does the slope of your line of best fit mean in this problem?
g. What does the y-intercept of your line of best fit mean in this problem?

Write a function to represent each table, pattern or sequence.
3.

| $\mathbf{x}$ | 2 | 4 | 6 | 8 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{f}(\mathbf{x})$ | -4 | -1 | 2 | 5 | 8 |

4. $a_{1}=7, \quad d=-2$

5. For each of your equations from $\# 3-5$, find the $37^{\text {th }}$ term.
a. Equation \#3:
b. Equation \#4:
c. Equation \#5:
