## Linear Quiz 1 Review Sheet

- Find the Rule
$\square$ Find the slope from a table, from a graph, and from two points. Interpret the Slope in Context.
- Graph from slope intercept form
- Write the equation for the graph
$\square$ Find the equation for the line from two points given
Daniel grows at a CONSTANT RATE. The table below shows his growth over time.

| Time(years) | 0 | 3 | 5 | 6 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Inches | $?$ | 36 | 44 | $?$ | 64 |

1) Fill in the missing data values.
2) Write an equation for Daniel's growth. What does the y intercept represent? What does the slope represent?

3) Write the equation for the line.
a. What does the slope mean in context?
b. What does the $y$ intercept mean in context?
4) 

Jack and Jill are selling cupcakes. Jack's total profit is given by the table to the left. Jill's total profit is given by the equation to the right. Who is gaining profit at a faster rate? How do you know?

| Number | Cost |
| :---: | :---: |
| 1 | $\$ 3.50$ |
| 2 | $\$ 6.50$ |
| 3 | $\$ 9.50$ |
| 4 | $\$ 12.50$ |
| 5 | $\$ 15.50$ |

$$
y=2 x+20
$$

5) $y=\frac{3}{2} x+2$
6) $y=4 x+1$
7) $y=-\frac{1}{2} x+3$
8) $y=-\frac{1}{3} x-2$

9) $y=-\frac{2}{3} x$
10) $y=-2$


Write the equation of the line in slope-intercept form.

11)
12)
14)
13)

14)

15)
16)

Write the equation of the line in slope-intercept form.
17) Slope $=\frac{5}{2}$, goes through $\left.(0,-4) \quad 18\right)$ Goes through $(3,1)$ and $(5,5)$
19) Goes through $(0,-5)$ and $(3,-4) \quad 20)$ Goes through $(5,-6)$ and $(2,6)$

