## Required Skills:

1) Create a linear equations from a set of values (a graph, a table, or information given)
2) Graph a linear relation and be able to use it to extrapolate data
3) Solve linear equations
4) Solve single variable inequalities

## Review Questions:

1. Given the following graph, what linear equation is represented?

2. Many counties in Florida missed many school days in the fall of 2004 due to hurricanes that year. A solution for how to make up those days was to add time to each school day for a portion of the year. It was decided that in order to make up a 6 hour school day, 10 minutes would be added to each day. How many extended days would be needed to make up 3 school days?
3. Write an equation to represent the following set of values:

| $\mathbf{x}$ | $\mathbf{y}$ |
| :--- | :--- |
| 89 | -11 |
| 107 | 11 |
| 116 | 22 |

4. Using the graph below, determine how many miles will be run on day 5 .

5. The questions below test your solving equation skills
1) $6=\frac{a}{4}+2$
2) $-6+\frac{x}{4}=-5$
3) $9 x-7=-7$
4) $0=4+\frac{n}{5}$
5) $-4=\frac{r}{20}-5$
6) $-1=\frac{5+x}{6}$
7) $5 p-14=8 p+4$
8) $-8=-(x+4)$
9) $14=-(p-8)$
10) $-18-6 k=6(1+3 k)$
11) $2(4 x-3)-8=4+2 x$
12) $-(1+7 x)-6(-7-x)=36$
13) $p-4=-9+p$
14) $12=-4(-6 x-3)$
15) $-(7-4 x)=9$
16) $5 n+34=-2(1-7 n)$
17) $3 n-5=-8(6+5 n)$
18) $-3(4 x+3)+4(6 x+1)=43$
6. Write a inequality representing that you need to receive over $50 \%$ to Science 10 .
7. Is 4 a possible solution to the inequality: $7+n>3$
8. What does the graph look like when $y$ is equal to a rational number? What does the graph look like when $x$ is equal to a rational number?

9. Using a number line represent that $x$ is less than or equal to 3 ? Use a number line to represent that y is more than 4
