SM2-A HW #6-2 (Where is f(x) positive, negative)   Period____
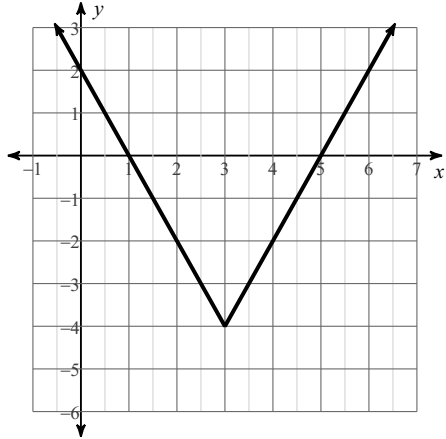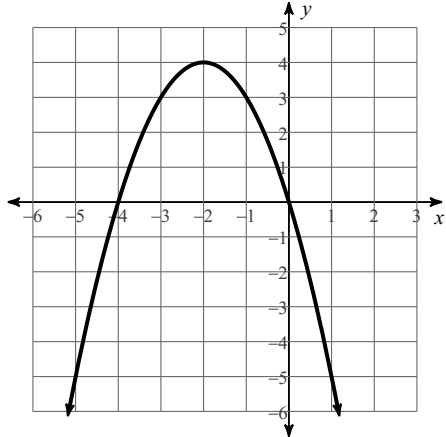
1) Use interval notation for your answers (where appropriate)
 a) Where is the function negative?
 b) Where is the function positive?
 c) What is the domain?
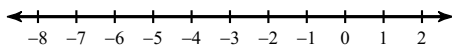 d) What is the range?
 e) What is the equation of the graph?

2) Use interval notation for your answers (where appropriate)
 a) Where is the function negative?
 b) Where is the function positive?
 c) What is the domain?
 d) What is the range?
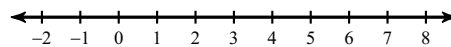 e) What is the equation of the graph?

Write the solution to the inequality using interval notation then graph its solution.
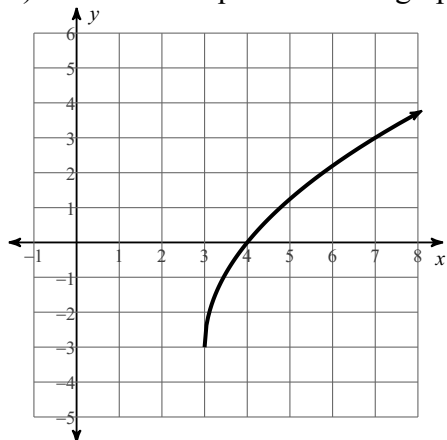
3) $6(6b - 5) + 3 \geq -243$

4) $65 > 3(5n - 2) - 4$
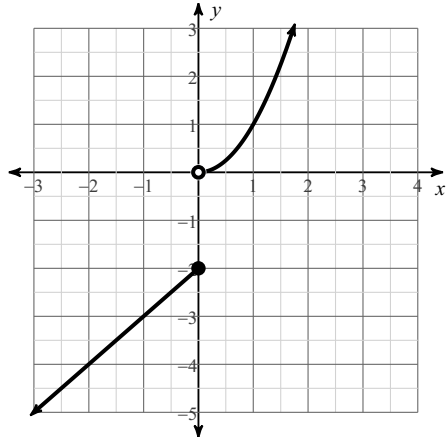
5) Use interval notation for your answers (where appropriate)
   a) Where is the function negative?
   b) Where is the function positive?
   c) What is the domain?
   d) What is the range?
   e) What is the equation of the graph?

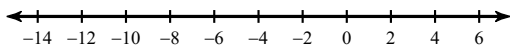6) Use interval notation for your answers (where appropriate)
   a) Where is the function negative?
   b) Where is the function positive?
   c) What is the domain?
   d) What is the range?
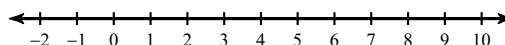   e) What two equation types have been graphed?

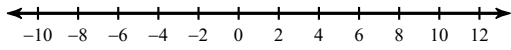**Write the solution to the inequality using interval notation then graph its solution.**

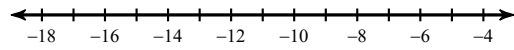7) $6x \geq 18$ or $x + 8 \leq -1$
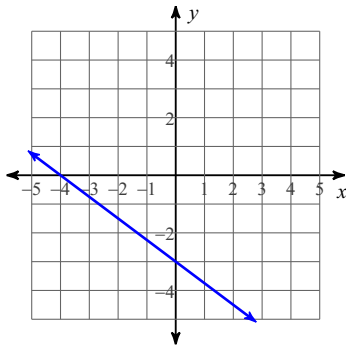
8) $\dfrac{x}{8} < 1$ and $-8 + x \geq -9$

9) $\left|k-1\right|\leq 9$

10) $\left|10+b\right|>3$

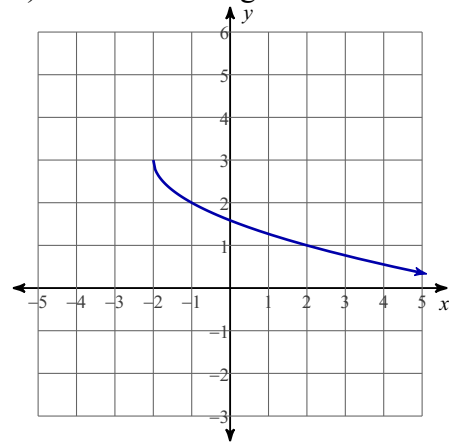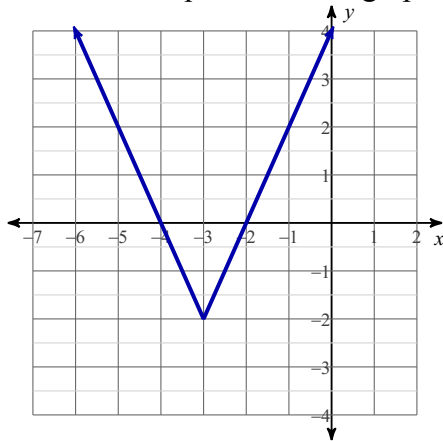**Write the slope-intercept form of the equation of each line.**

11)

12) a) What is the equation of the graph?
b) What is the domain?
c) What is the range?

13) What is the equation of the graph?

14) What is the equation of the graph?