

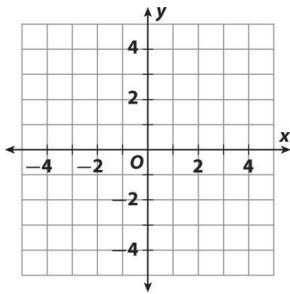
Name: _____

CW 2.1 - 2.2

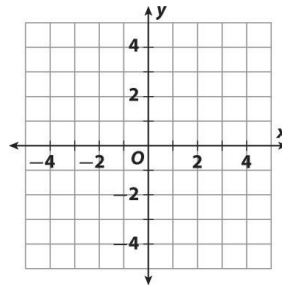
Absolute Value Functions

Graph each function. Then identify the vertex, and range.

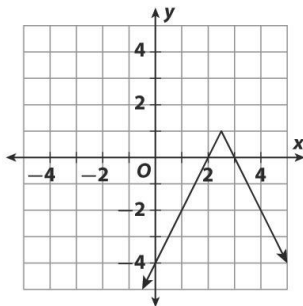
1. $f(x) = 2|x - 3| - 4$



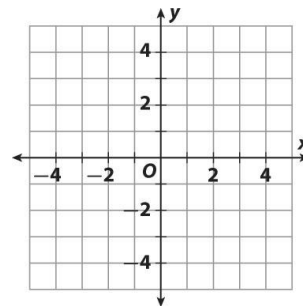
2. $f(x) = -\left|\frac{1}{3}(x + 2)\right| + 2$



3. Let $b = 1$, find the equation of the following graph (show work):



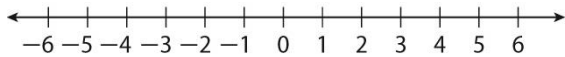
4. Solve the following equation graphically: $3|x - 1| - 2 = 4$



For #'s 5 and 6, Solve. Graph your solution to #5 on a number line.

5. $2\left|\frac{1}{2}x - 1\right| - 1 = 3$

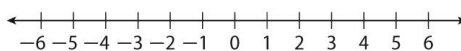
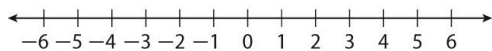
6. $-\frac{3}{2}|3x - 3| - 4 = -6$



For #'s 7 and 8, Solve. Graph your solutions on a number line.

7. $4 + 2|x - 1| + 5 > 3$

8. $\frac{3}{2}|x - 3| - 1 < 2$



9. what is the vertex of $y = 4|2x - 5| + 1$? (Be careful! Hint: $\frac{1}{b}(x - h)$)