3.2 Absolute Value Graphs

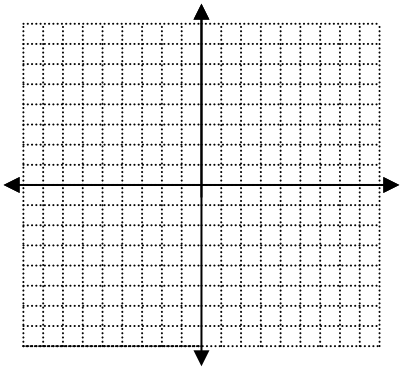
Corrective Assignment

NAME:_____

DATE:_____

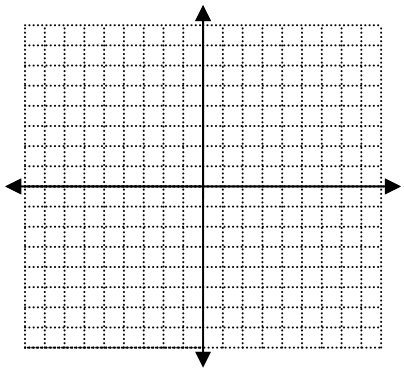
Graph the following absolute value functions. State the range.

1. $y = |x + 3| - 5$



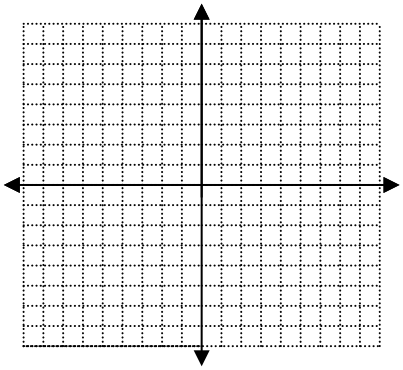
Range =

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



Range =

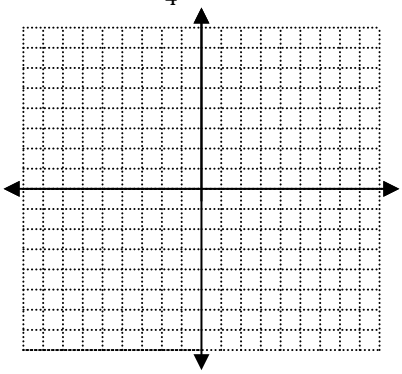
3. $y = -2|x - 1|$



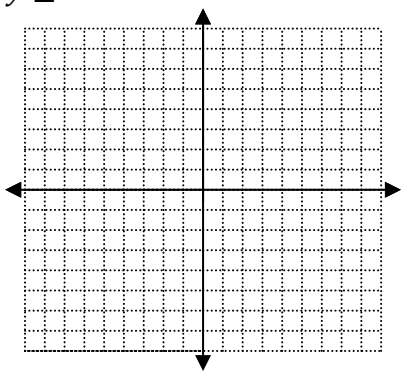
Range =

Graph the following inequalities.

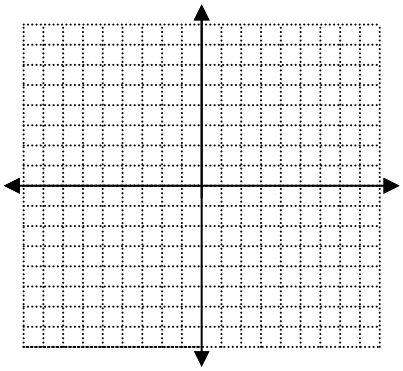
4. $f(x) < 6 - \frac{3}{4}x$



5. $y \geq -4$

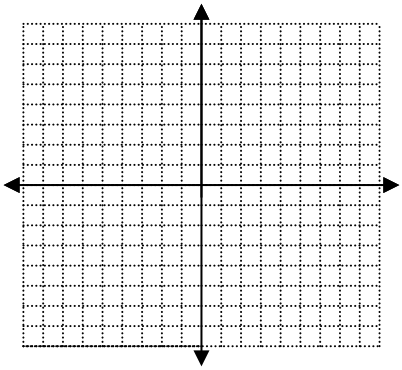


6. $2x - 3y \leq -12$

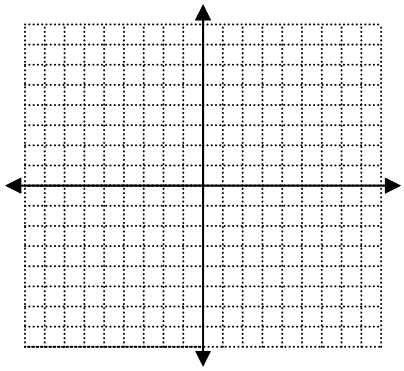


Graph the following absolute value inequalities.

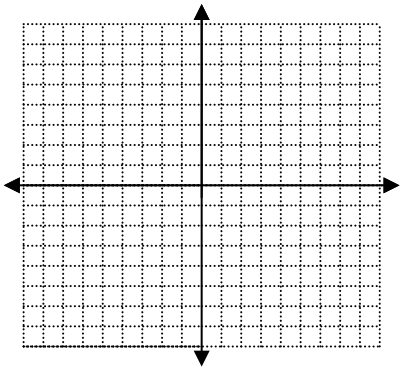
7. $y \geq 3|x| - 4$



8. $f(x) \leq \frac{3}{5}|x - 2| - 6$

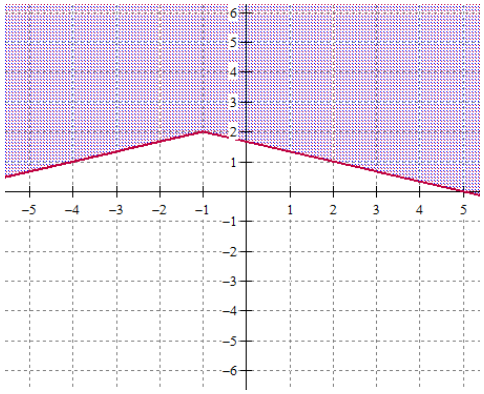


9. $y > -\frac{1}{2}|x + 5| + 4$

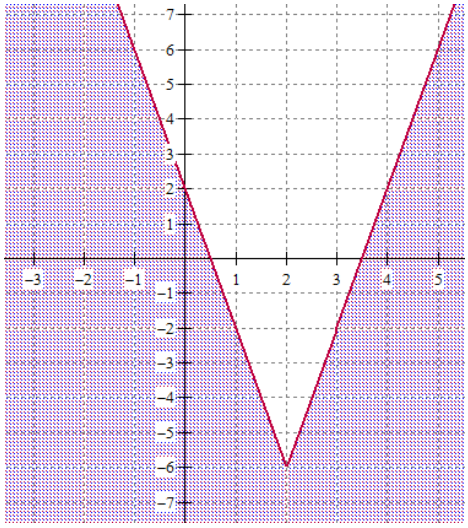


Write the equation of the following inequality. Is the point given in the solution set?

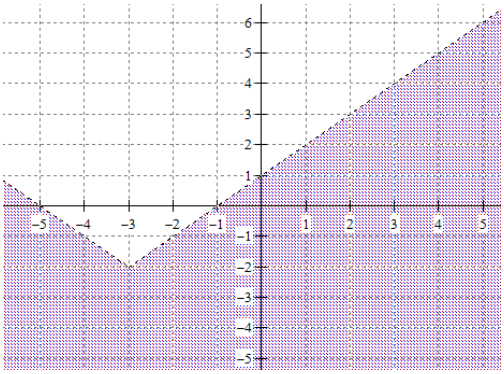
10. (3,0)



11. (1,-3)

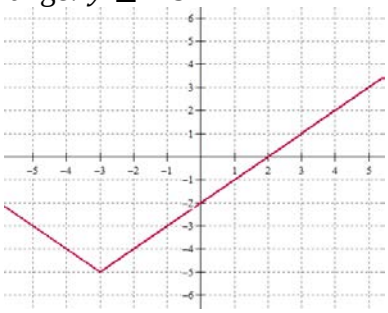


12. (0,1)

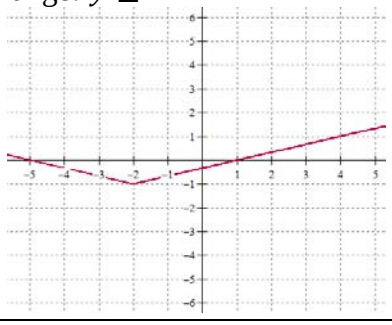


ANSWERS TO CORRECTIVE ASSIGNMENT

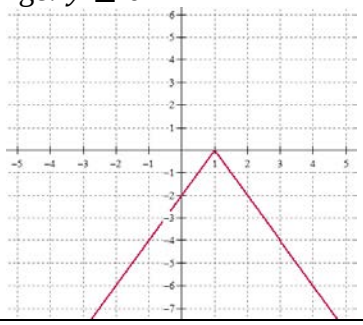
1. Range: $y \geq -5$



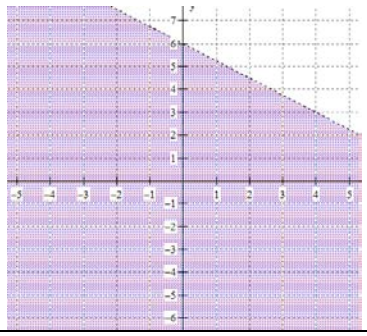
2. Range: $y \geq -1$



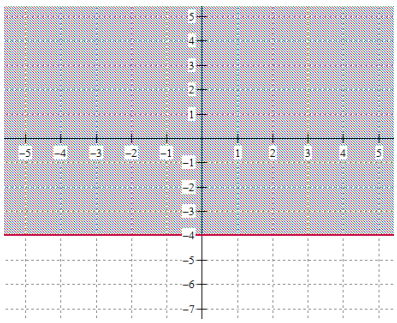
3. Range: $y \leq 0$



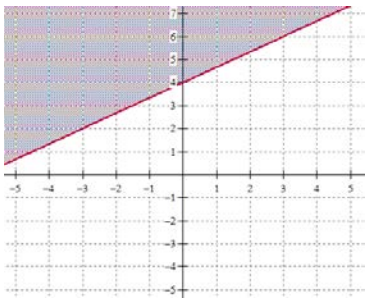
4.



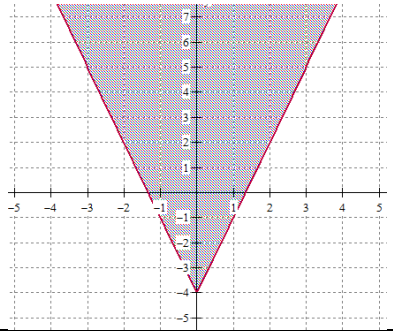
5.



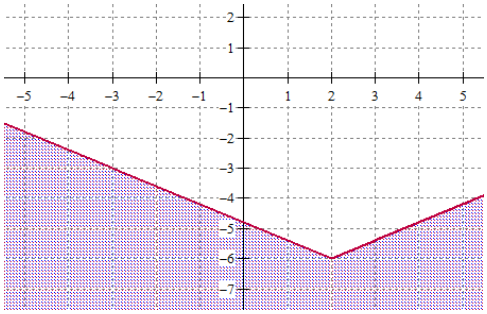
6.



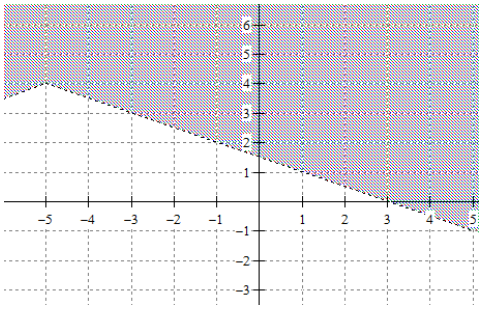
7.



8.



9.



10. No, $y \geq -\frac{1}{3}|x+1|+2$

11. Yes, $y \leq 4|x-2|-6$

12. No, $y < |x+3|-2$