

Name :

Write a linear equation ($y = mx + b$) to represent the information given in each problem.

1) slope = -6, passes thru (0, 10)

2) slope = $\frac{1}{2}$, passes thru (-8, 3)

3) passes thru (8, 2) & (6, 6)

4) has x-intercept of -1 and y-intercept of 3

5) passes thru (4, 2) and is \perp to the line whose equation is $y - 2x - 5 = 0$

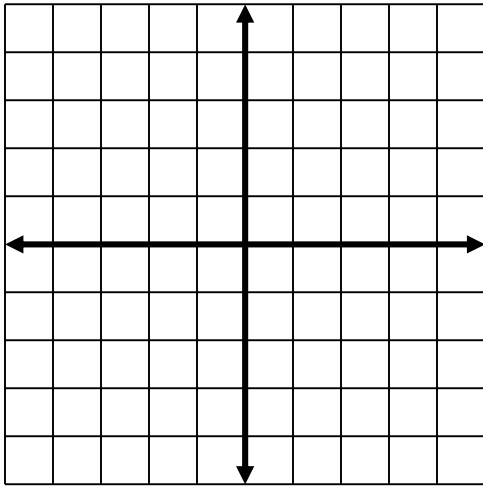
6) passes thru (-5, -2), and is parallel to the line that passes thru (4, -1) & (5, -1)

7) passes thru (3, -8) & (3, 2)

8) is perpendicular to the line $3x - 4y = 20$ at its y-intercept

Graph the following absolute value **equations**. Then, name the domain and range for each. Remember, absolute values make the shape of a V. Also, **equations** do not get shaded.

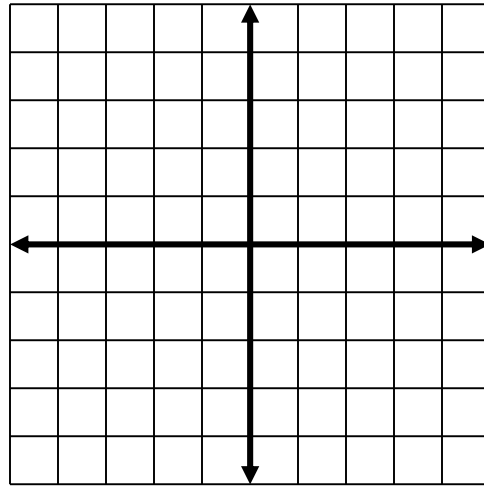
9) $y = |x + 2| - 4$



Domain: _____

Range: _____

10) $f(x) = -3|x| + 5$

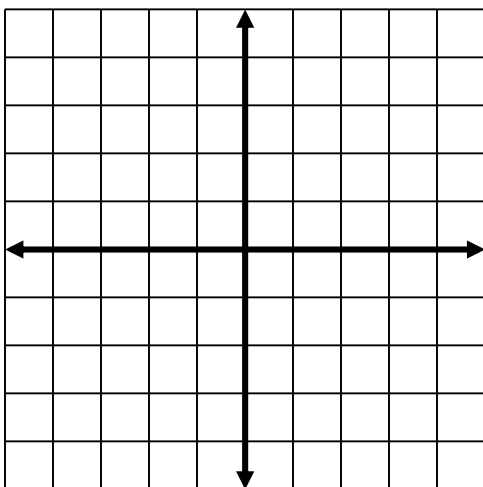


Domain: _____

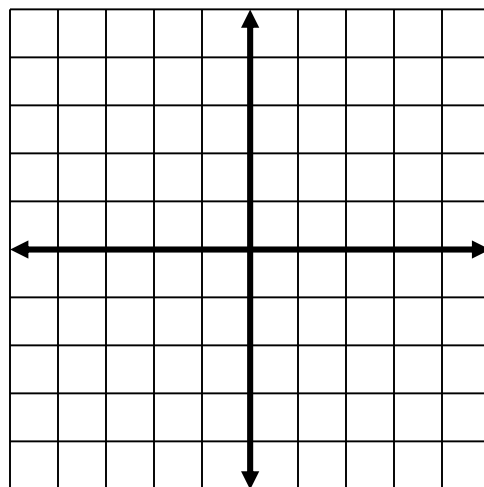
Range: _____

Graph each inequality.

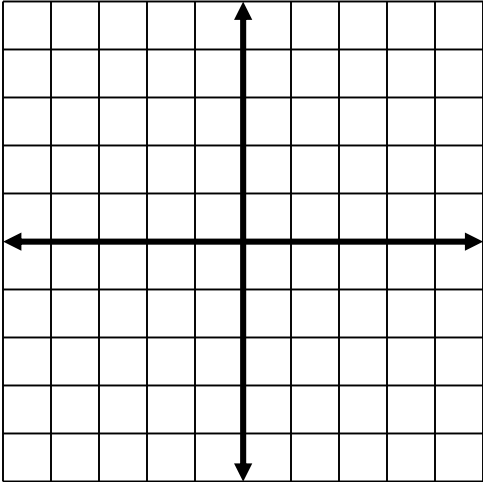
11) $y > 1$



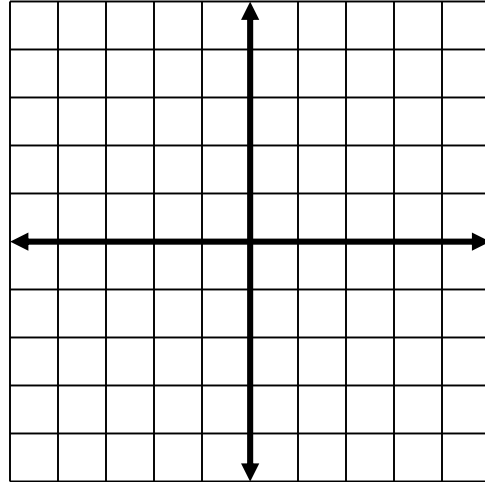
12) $y \leq |x + 2|$



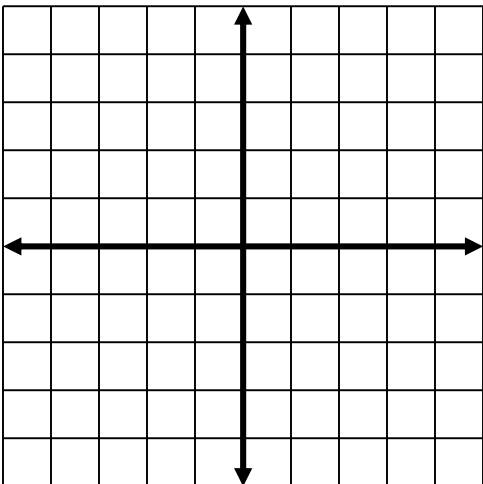
13) $2 - y < x$



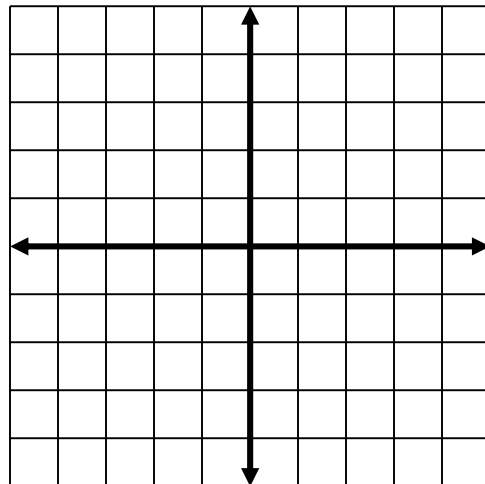
14) $9x + 3y - 6 \leq 0$



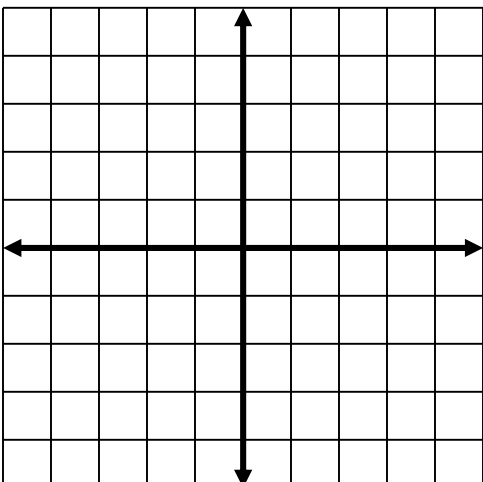
15) $f(x) > \frac{2}{3} |x - 3|$



16) $y + 1 \geq |2x|$



17) $-7x - 1 \geq -29$



18) $f(x) < -\frac{1}{2} |x - 1| + 3$

