

Absolute Value Test - SOLUTIONS

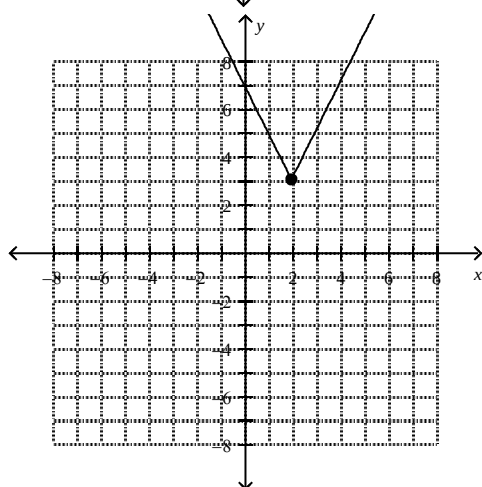
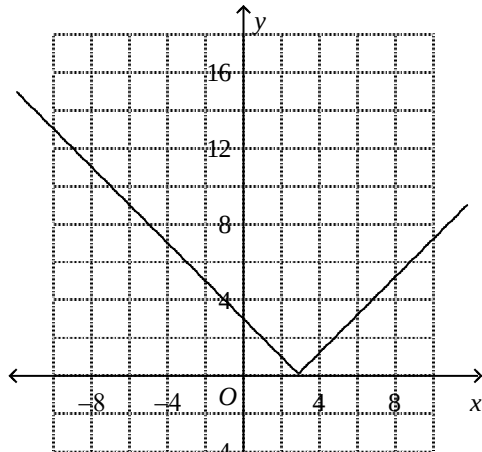
1. $f(x) = 50|x|$

2. $f(x) = 40|x|$

3. The second function is the graph of $y = -3|x|$ moved up 4 units.

4. The second function is the graph of $y = 4|x|$ moved down 5 units.

5.



6.

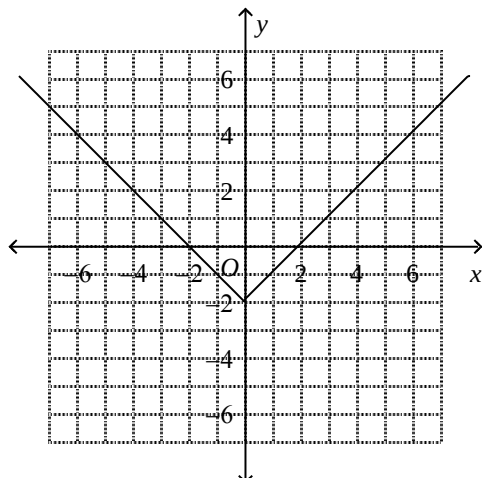
(1, 6)

7.

(2, -6)

8.

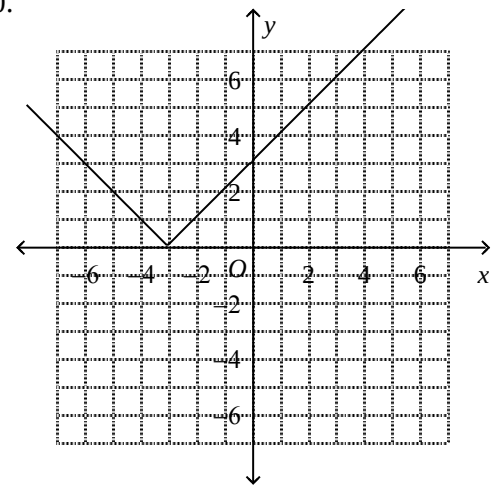
9.



domain: all real numbers or $(-\infty, \infty)$

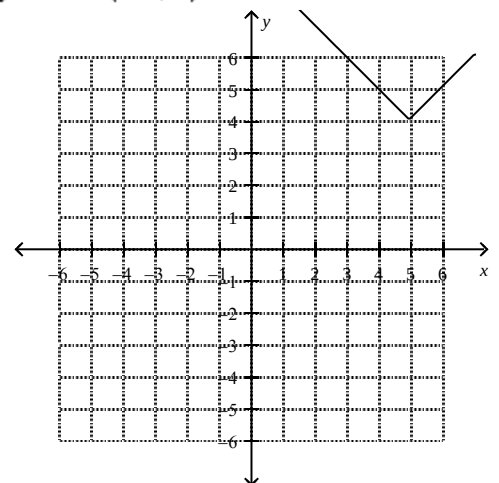
range: $y \geq -2$ or $(-2, \infty)$

10.

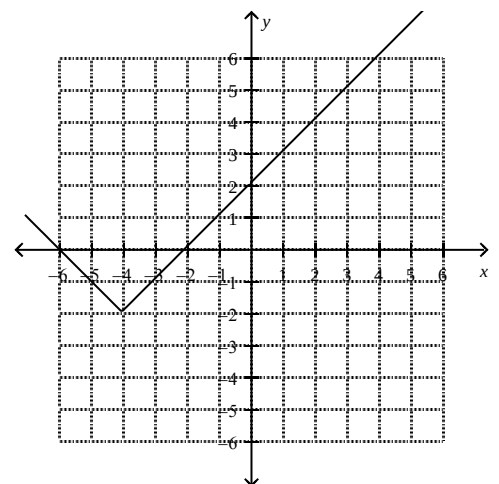


domain: all real numbers or $(-\infty, \infty)$

range: $y \geq 0$ or $(-\infty, \infty)$

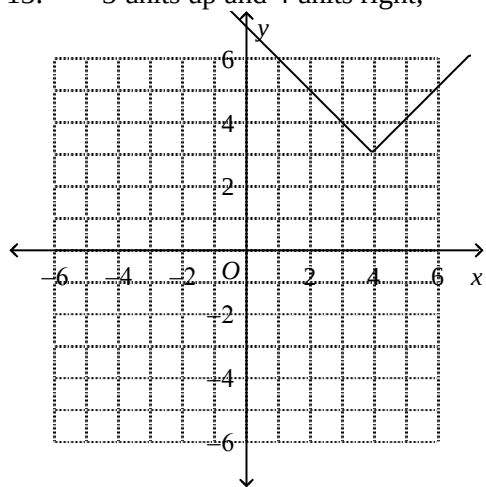


11.

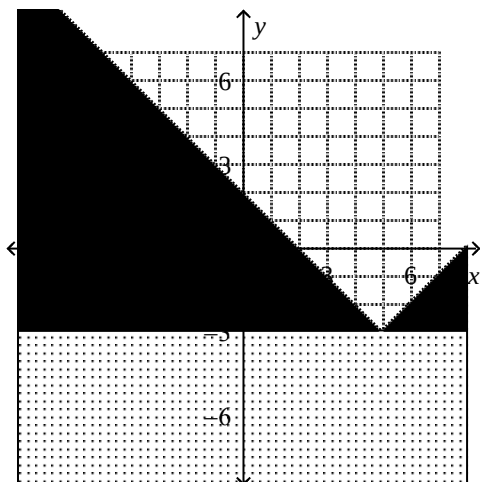


12.

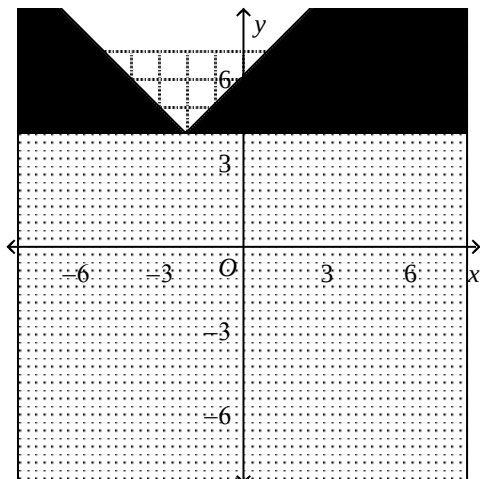
13. 3 units up and 4 units right;



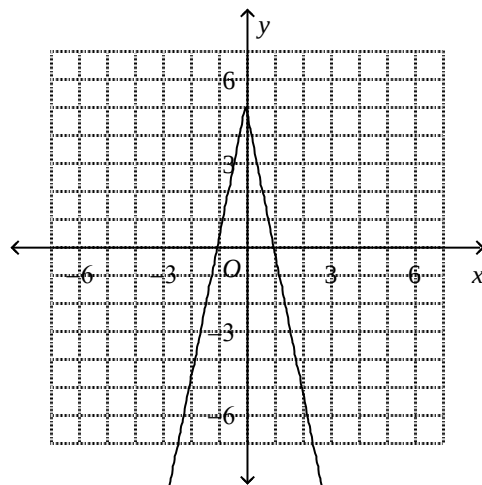
14.



15.



16.



17. $y \geq |x - 4| - 1$
 18. $y \leq |x + 4| + 3$
 19. $y = -|x - 5|$
 20. $y = |x - 11| + 5$
 21. $y = |x - 13| - 8$
 22. domain: all real numbers / $(-\infty, \infty)$
 range: $y \geq -1$ / $(-1, \infty)$
 23. domain: all real numbers / $(-\infty, \infty)$
 range: $y \geq 12$ / $(12, \infty)$
 24. $t = -1, y = 3$
 25. $\begin{bmatrix} -3 & -11 \\ 3 & -7 \end{bmatrix}$
 26. $\begin{bmatrix} 75 \\ 52 \end{bmatrix}$
 27. $\begin{bmatrix} 42 \\ 12 \end{bmatrix}$
 28. $\begin{bmatrix} -7 & 64 \\ 13 & -6 \end{bmatrix}$
 29. $\begin{bmatrix} 26 & 47 \\ -18 & 50 \end{bmatrix}$
 30. -4
 31. -36