Absolute Value Functions (2.8): 8-11, 18-20, 27-29
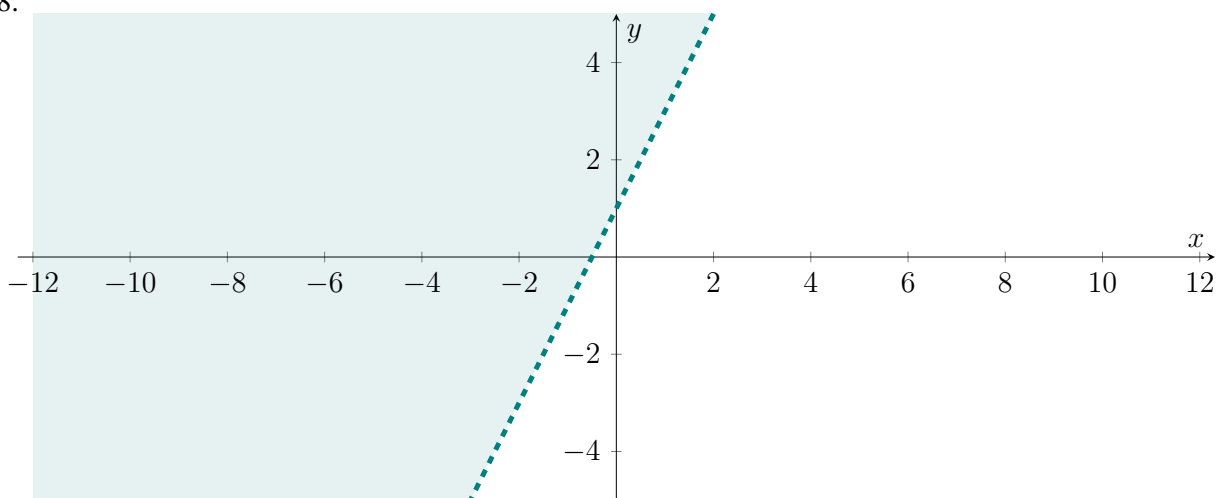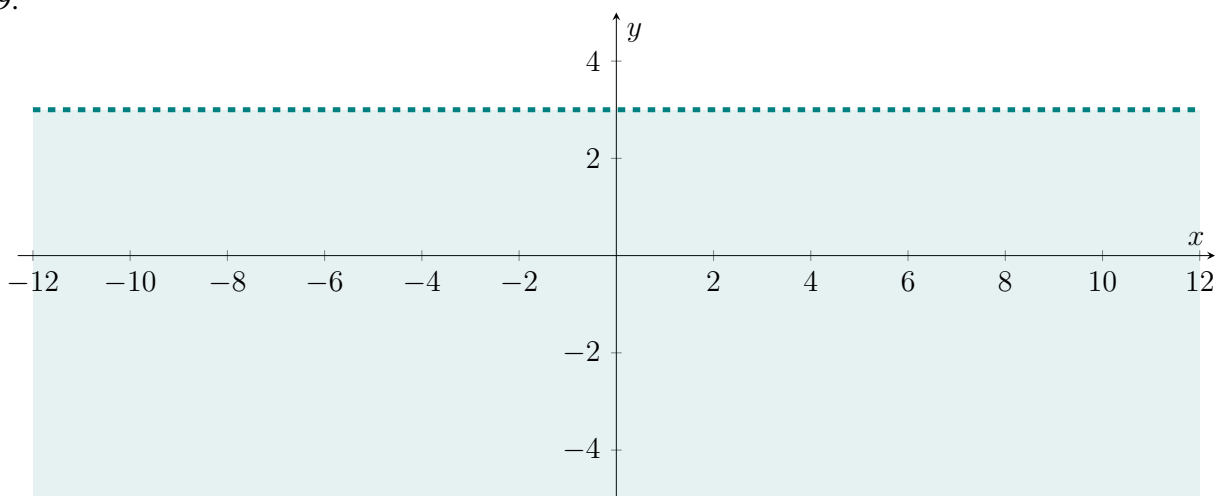
8.
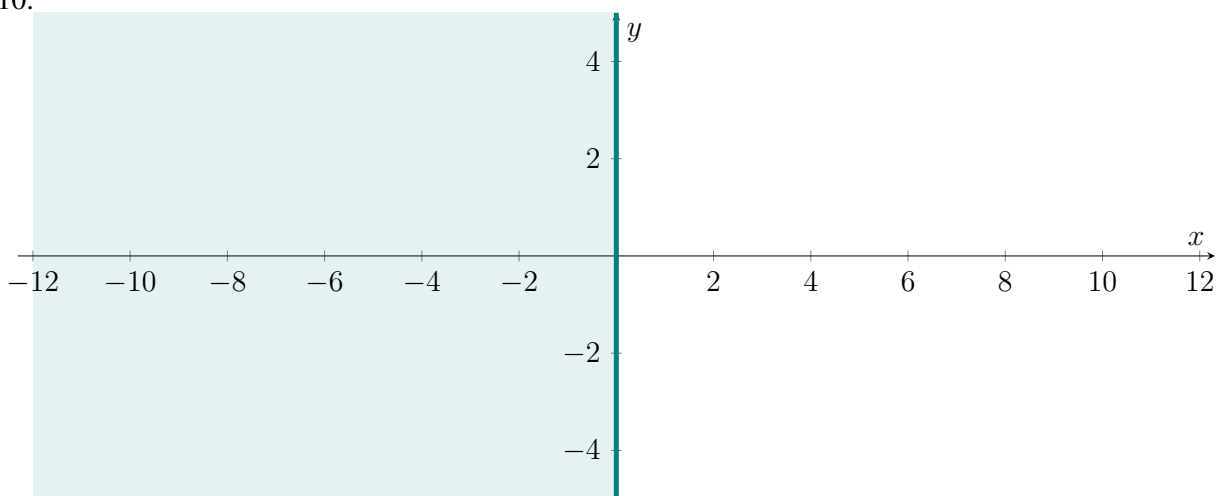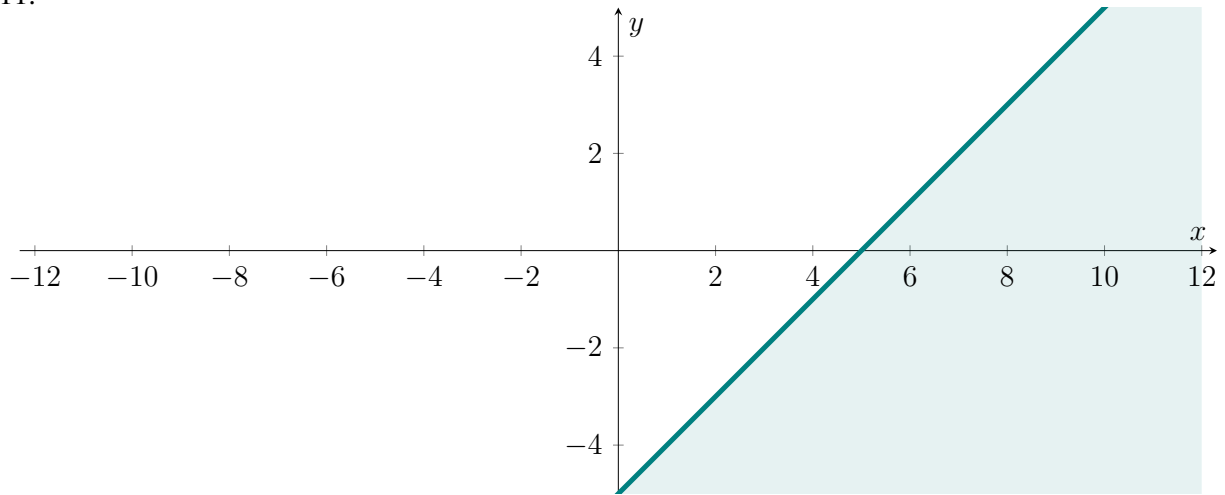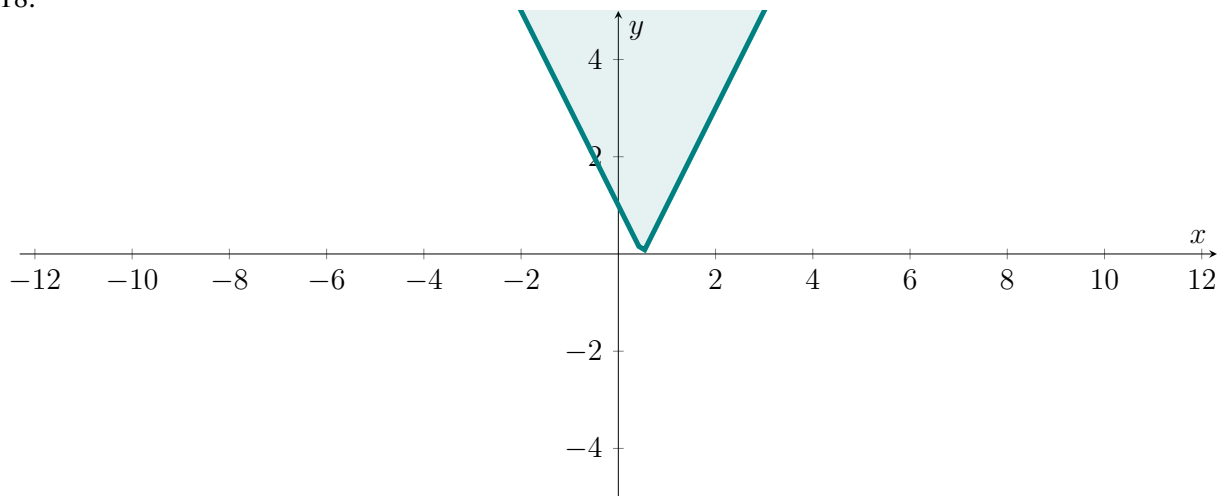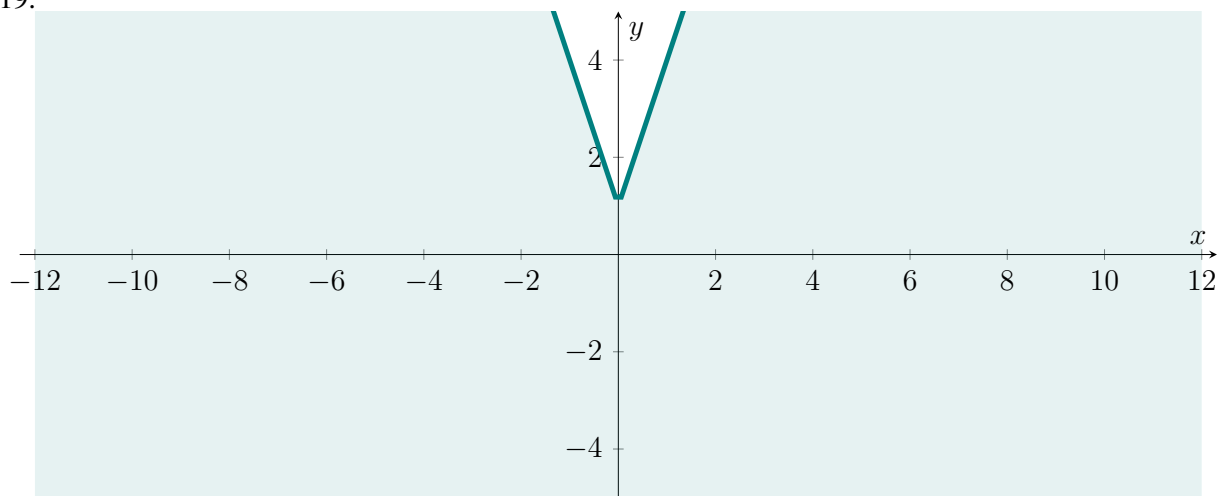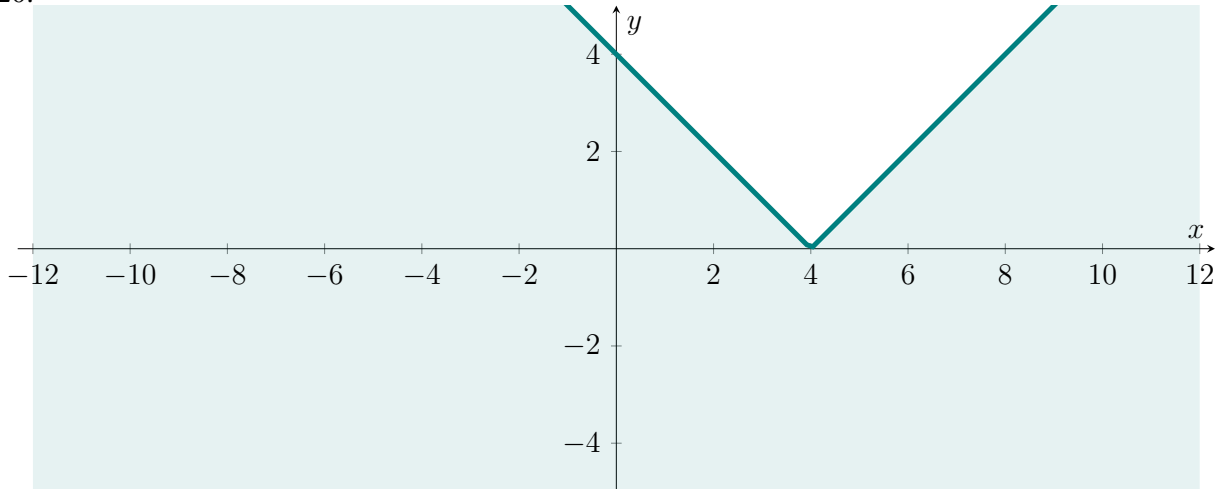

9.

10.

11.

18.

19.

20.

27. $y < -x - 2$
28. $5x + 3y \leq 9$
29. $2y \geq |2x + 6|$

Chapter 2 Test: All Even Problems

2. Domain = $\{3, 4, 5, 6, 7\}$. Range = $\{2, 3, 4, 5, 6\}$.
4. Yes.
6. $2(1) - 5 + |-3(2) - 1| = -3 + 7 = 4$
8. $|-3(2) - 1| - (2(0) - 5) = |-7| - (-5) = 12$
10. $2 * |-3(-4) - 1| = 2 * 11 = 22$
12.

$$y - 1/2 = \frac{1}{2}(x + 1/2)$$
$$y = \frac{1}{2}x + \frac{3}{4}$$

14.

$$y - 7 = \frac{2}{5}(x - 6)$$
$$5y - 35 = 2x - 12$$
$$-2x + 5y = 23$$

16.

$$y - 6 = -0.5x$$
$$2y - 12 = -x$$
$$x + 2y = 12$$

18.

$$m = 16/-1 = -16$$
$$y + 6 = 16(x + 1)$$
$$y + 6 = 16x + 16$$
$$y = 16x + 10$$

9

20.

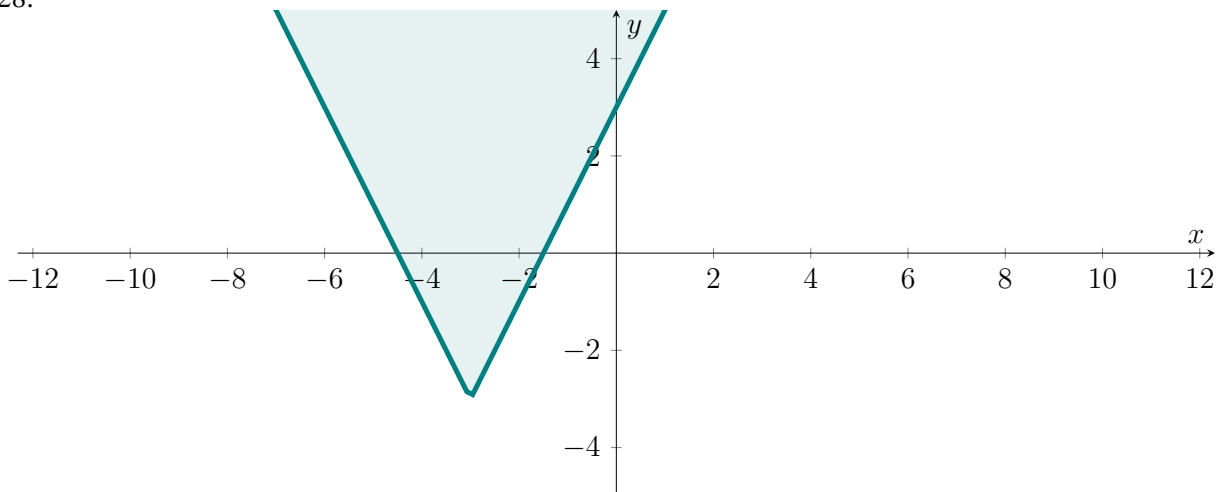$$m = -3/-1 = 3$$
$$y - 5 = 3(x - 9)$$
$$y - 5 = 3x - 27$$
$$y = 3x - 22$$

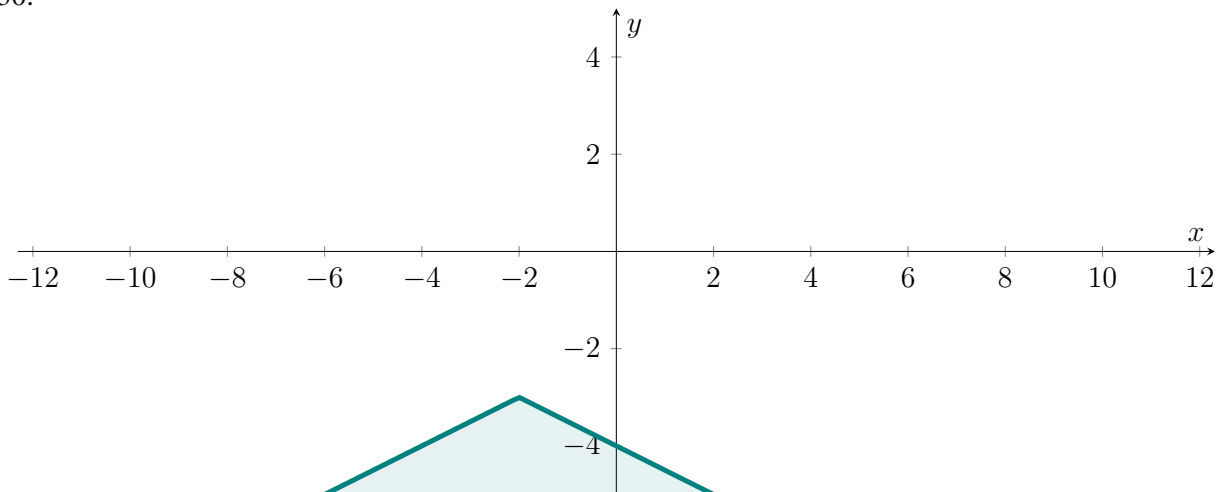22. Skip this question. Useless topic.
24. $y = -6x + 9.$ $6x + y = 9$
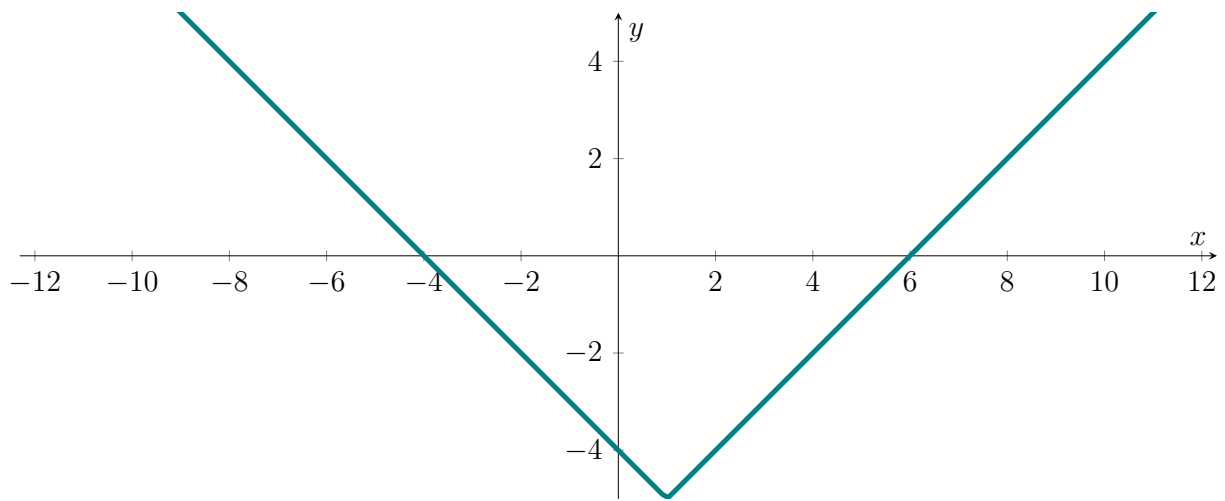26. $y = -x/2 + 4.$ $x + 2y = 8$
28.

30.

32. If you plug in 0 for x and see what y is equal to, and then plug in 0 for y and see what x is equal to, you can use those numbers to retreive the slope again.
34. Slide right by 1. Slide down by 5.

36. Slide left by 1. Vertically stretch by a factor of 2.