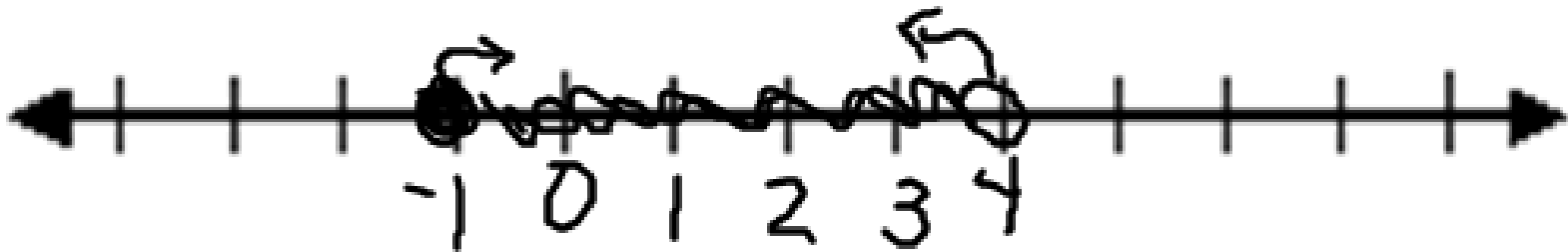# Quiz Review
6 - 4 through 6 - 6

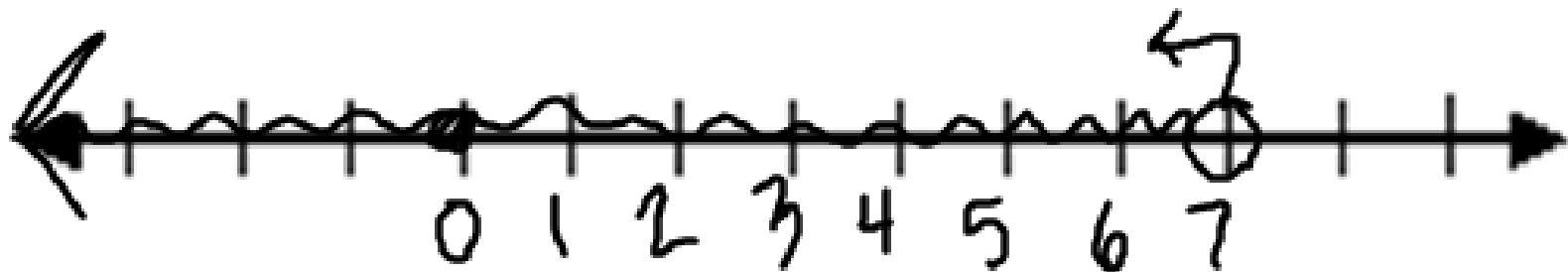# Graph the solution set of each compound inequality.

1. $p < 4$ and $p \geq -1$

Graph the solution set of each compound inequality.

2. x < 7 or x ≤ 0

Graph the solution set of each compound inequality.

3. m > 6 or m < 6

Solve each compound inequality.

4. $k - 3 < -7$ or $k + 5 \geq 8$

   $+3 \quad +3$ $-5 \quad -5$

$$\boxed{k < -4 \quad \text{or} \quad k \geq 3}$$

Solve each compound inequality.

5. $2c - 4 > -6$ and $3c + 1 < 13$

$+4 \quad +4$ $\qquad$ $-1 \quad -1$

$$\frac{2c}{2} > \frac{-2}{2}$$

$$\frac{3c}{3} < \frac{12}{3}$$

$c > -1$ and $c < 4$

Solve each open sentence. Then graph the solution set.

6. $|x + 4| = 1$

$x + 4 = 1$
$-4 \quad -4$

$\boxed{x = -3}$

$x + 4 = -1$
$-4 \quad -4$

$\boxed{x = -5}$
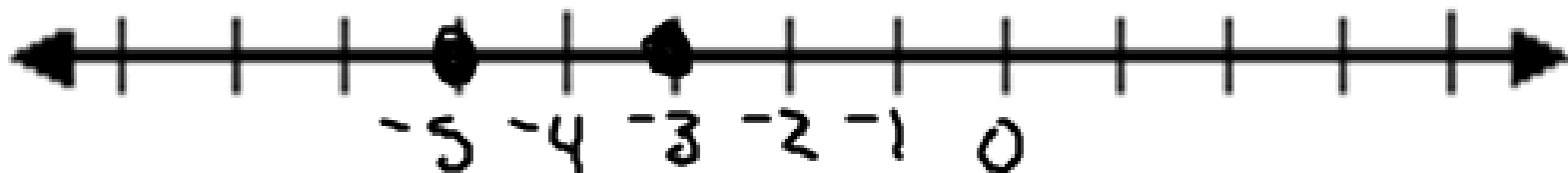
Solve each open sentence. Then graph the solution set.

7. $|4y - 2| = 10$

$$4y - 2 = 10 \qquad 4y - 2 = -10$$
$$ +2 \ +2 \qquad +2 \ +2$$

$$\frac{4y}{4} = \frac{12}{4} \qquad \frac{4y}{4} = \frac{-8}{4}$$

$$\boxed{y = 3} \qquad \boxed{y = -2}$$

Solve each open sentence. (No graphing.)

8. $|2d - 1| \leq 5$

$$2d - 1 \leq 5$$
$$ +1 \quad +1$$

$$\frac{2d}{2} \leq \frac{6}{2}$$

$$\boxed{d \leq 3}$$

$$2d - 1 \geq -5$$
$$ +1 \quad +1$$

$$\frac{2d}{2} \geq \frac{-4}{2}$$
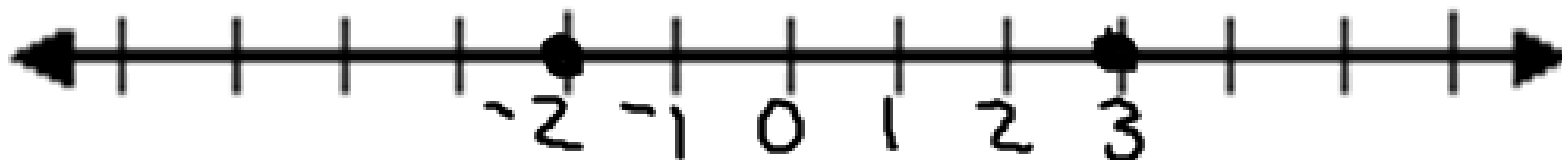
$$\boxed{d \geq -2}$$

Solve each open sentence.
(No graphing.)

9. $|3x + 2| > 7$

$$3x + 2 > 7$$
$$-2 \quad -2$$

$$\frac{3x}{3} > \frac{5}{3}$$

$$\boxed{x > \frac{5}{3}}$$

$$3x + 2 < -7$$
$$-2 \quad -2$$

$$\frac{3x}{3} < \frac{-9}{3}$$

$$\boxed{x < -3}$$

10. For the set
{ (2, -3), (-2, -1), (1, 6), (3, 4) },
determine which ordered pairs
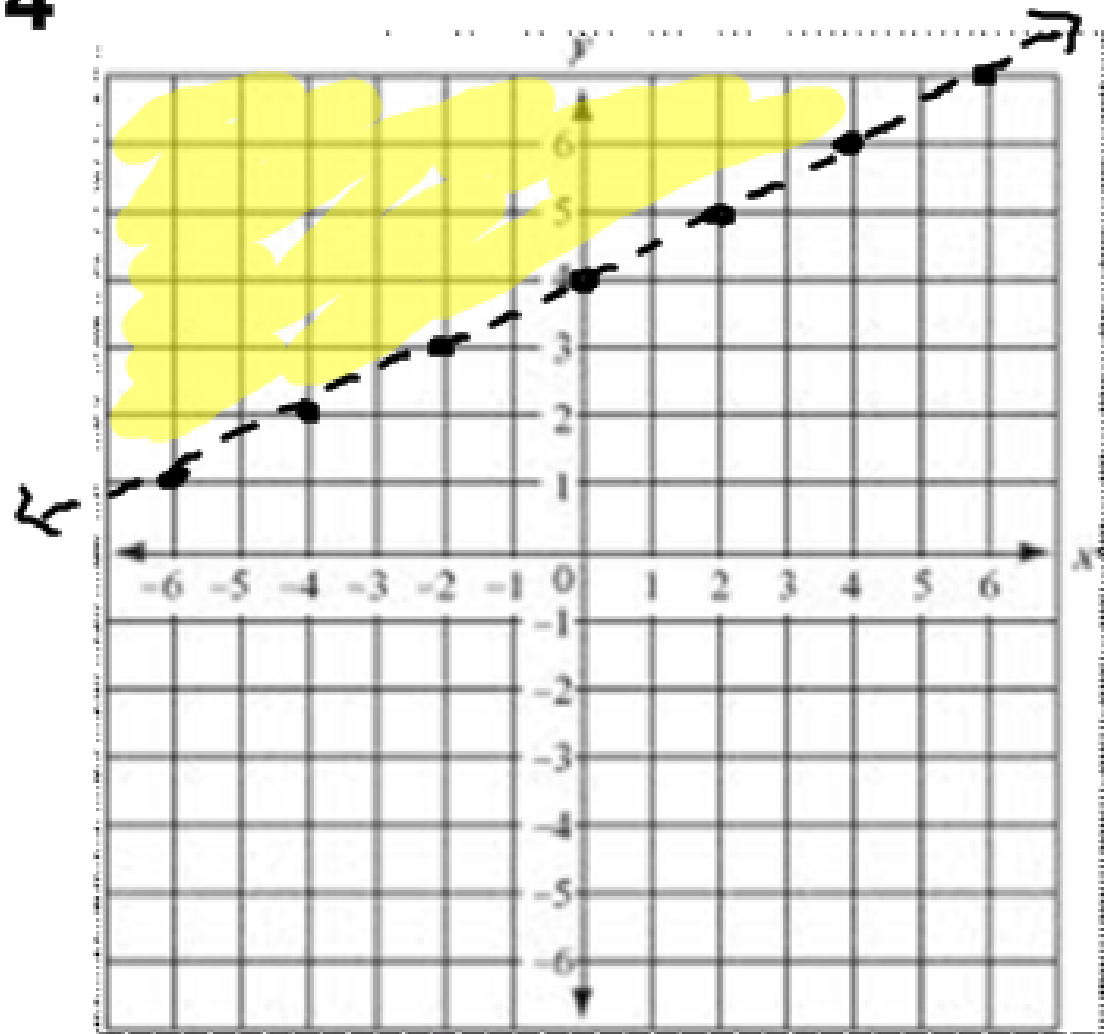are part of the solution set of
$y \geq x + 3$.

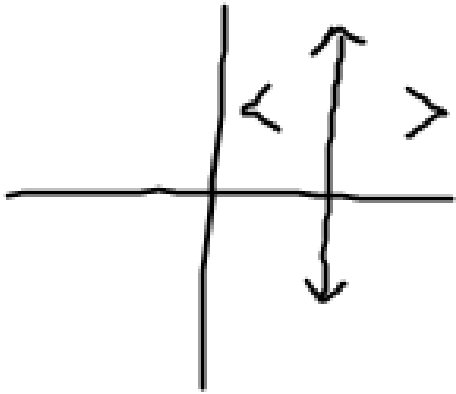# Graph each inequality.

11. $y \leq 2x - 5$
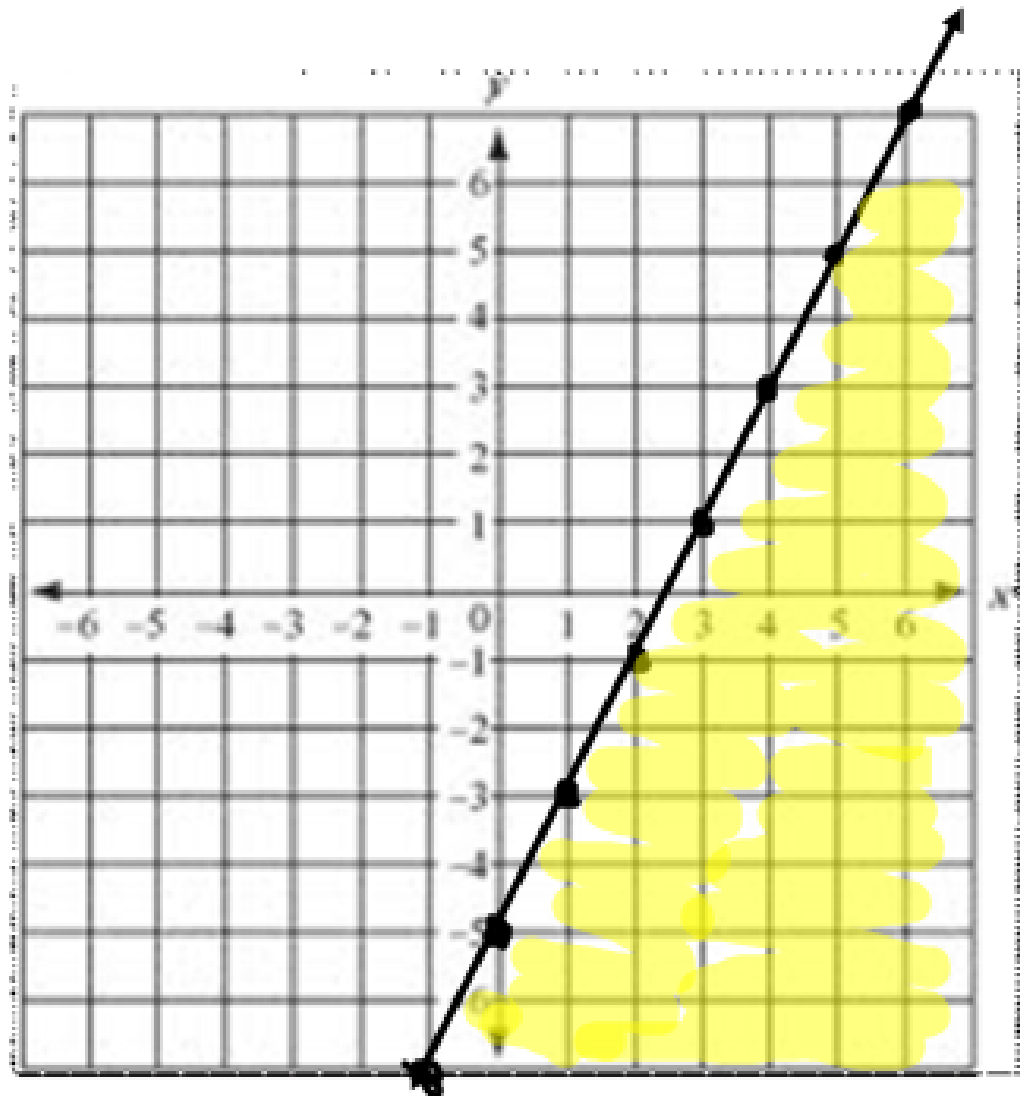
Graph each inequality.

12. $y > \dfrac{1}{2}x + 4$

$x = 4$

$y = 4$