

Name :

Date :

Quadratic Inequalities

Solve the given inequalities and graph if possible.

1 $x^2 - 2x - 3 \geq 0$

2 $x^2 + 9x + 13 > -7$

3 $x^2 > 4(8 - x)$

4 $2x^2 + 9x + 10 > 0$

5 $a^2 < 4(2a - 3)$

6 $2d^2 + 5d \leq 12$

7 $3p^2 + 8 > 20$

8 $x^2 - 5x + 24 < 5x + 8$

9 $x^2 + 8x - 9 \geq 0$

10 $3x^2 - 5x - 1 < 4x^2 + 7x + 19$

Name : _____

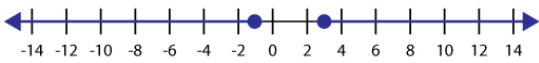
Date : _____

Quadratic Inequalities

Answers

1 $x^2 - 2x - 3 \geq 0$

$x \leq -1$ or $x \geq 3$



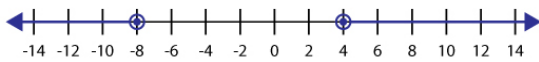
2 $x^2 + 9x + 13 > -7$

$x < -5$ or $x > -4$



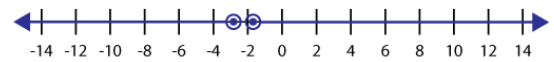
3 $x^2 > 4(8 - x)$

$x < -8$ or $x > 4$



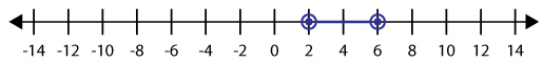
4 $2x^2 + 9x + 10 > 0$

$x < -\frac{5}{2}$ or $x > -2$



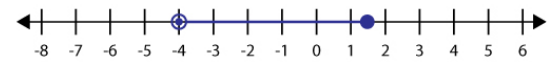
5 $a^2 < 4(2a - 3)$

$2 < a < 6$



6 $2d^2 + 5d \leq 12$

$-4 < d \leq \frac{3}{2}$



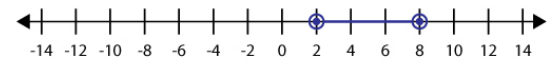
7 $3p^2 + 8 > 20$

$p < -2$ or $p > 2$



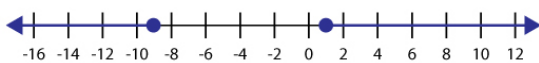
8 $x^2 - 5x + 24 < 5x + 8$

$2 < x < 8$



9 $x^2 + 8x - 9 \geq 0$

$x \leq -9$ or $x \geq 1$



10 $3x^2 - 5x - 1 < 4x^2 + 7x + 19$

No solution