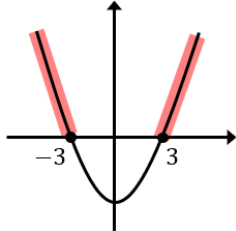
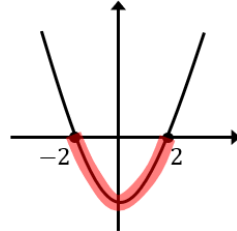
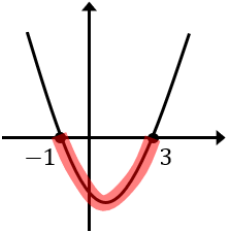
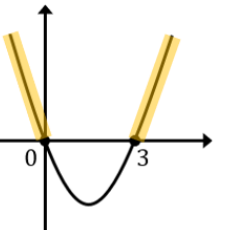
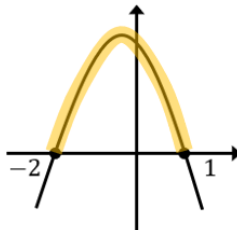
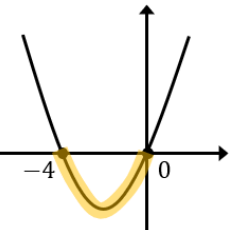
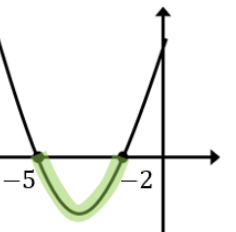
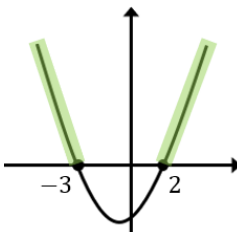
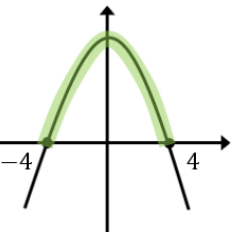
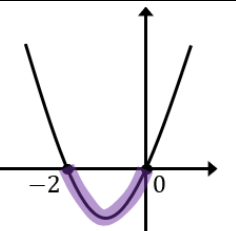
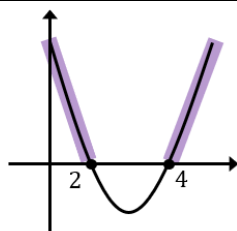
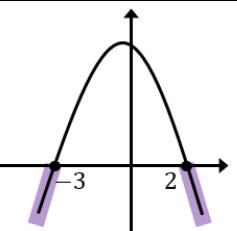


## Solving Quadratic Inequalities

Use the partially completed quadratic sketches to solve the inequalities given:

<b>(a)</b>	<b>(b)</b>	<b>(c)</b>
		
$x^2 - 9 > 0$ $(x + 3)(x - 3) > 0$  $x > 3, x < 3$	$x^2 - 4 \leq 0$ $(x + 2)(x - 2) \leq 0$  $-2 \leq x \leq 2$	$x^2 - 2x - 3 < 0$ $(x + 1)(x - 3) < 0$  $-1 < x < 3$
<b>(d)</b>	<b>(e)</b>	<b>(f)</b>
		
$x^2 - 3x \geq 0$ $x(x - 3) \geq 0$  $x \leq 0, x \geq 3$	$2 - x - x^2 > 0$ $(2 + x)(1 - x) > 0$  $-2 < x < 1$	$x^2 + 4x < 0$ $x(x + 4) < 0$  $-4 < x < 0$
<b>(g)</b>	<b>(h)</b>	<b>(i)</b>
		
$x^2 + 7x + 10 \leq 0$ $(x + 5)(x + 2) \leq 0$  $-5 \leq x \leq -2$	$x^2 + x - 6 \geq 0$ $(x + 3)(x - 2) \geq 0$  $x \leq -3, x \geq 2$	$16 - x^2 > 0$ $(4 + x)(4 - x) > 0$  $-4 < x < 4$
<b>(j)</b>	<b>(k)</b>	<b>(l)</b>
		
$x^2 + 2x < 0$ $x(x + 2) < 0$  $-2 < x < 0$	$x^2 - 6x + 8 > 0$ $(x - 4)(x - 2) > 0$  $x < 2, x > 4$	$6 - x - x^2 \leq 0$ $(3 + x)(2 - x) \leq 0$  $x \leq -3, x \geq 2$