



# Fill In The Blanks...



## Solving Quadratic Inequalities

Quadratic Inequality	Factorised Quadratic	Critical Values	Sketch and Shade	Solution
$x^2 - 3x - 10 < 0$	$(x - 5)(x + 2) < 0$	$x = 5,$ $x = -2$		$-2 < x < 5$
$x^2 + 4x - 12 < 0$	$(x + 6)(x - 2) < 0$	$x = -6,$ $x = 2$		$-6 < x < 2$
$x^2 - 6x + 5 < 0$	$(x - 5)(x - 1) < 0$	$x = 5,$ $x = 1$		$1 < x < 5$
$x^2 + 5x + 6 \leq 0$	$(x + 2)(x + 3) \leq 0$	$x = -2,$ $x = -3$		$-3 \leq x \leq -2$
$x^2 - 4x - 12 > 0$	$(x - 6)(x + 2) > 0$	$x = 6,$ $x = -2$		$x < -2,$ $x > 6$
$x^2 + 4x + 3 \geq 0$	$(x + 3)(x + 1) \geq 0$	$x = -3,$ $x = -1$		$x \geq -1,$ $x \leq -3$
$x^2 - x - 6 \geq 0$	$(x - 3)(x + 2) \geq 0$	$x = 3,$ $x = -2$		$x \geq 3,$ $x \leq -2$
$x^2 + 3x - 4 < 0$	$(x + 4)(x - 1) < 0$	$x = 1,$ $x = -4$		$-4 < x < 1$