

Quadratic Inequalities

1. What are the solutions of the following inequalities?

a)	$5(x - 3)(x + 2) \leq 0$
b)	$-4(x - 2)(x + 6) > 0$
c)	$x^2 + 2.5x + 4 > 7.5$
d)	$5(x + 4)^2 < 845$
e)	$5(x - 4)^2 + 6 \geq 186$
f)	$-2x^2 - 6x + 30 \geq -50$
g)	$0.5(x^2 + 8x + 7) < 8$

2. Find the solution set of the following inequalities.

a)	$-12(x - 50)(x + 200) < 0$
b)	$0.2(x - 7)(x + 3) \leq 0$
c)	$3(x + 4)^2 + 10 \leq 202$
d)	$100x^2 + 120x - 200 < 664$
e)	$2(x + 15)(x - 3) \geq 0$
f)	$-50x^2 + 60x > 20$
g)	$-x^2 - 5x > 8$
h)	$2x^2 \geq 2x + 4$
i)	$0.5(x + 4)^2 - 12.5 \leq 0$