

Graphs and Equations

Solving Inequalities Graphically

Solving Absolute Value Inequalities Graphically

Solve the following equations and inequalities graphically.

a) $|2x + 3| = 5$

The solution set is _____

b) $|2x + 3| < 5$

The solution set is _____

c) $|2x + 3| \geq 5$

The solution set is _____

Solving Quadratic Inequalities Graphically

Solve the following equations and inequalities graphically.

a) $-x^2 + 3x + 6 = 2$

The solution set is _____

b) $-x^2 + 3x + 6 \leq 2$

The solution set is _____

c) $-x^2 + 3x + 6 > 2$

The solution set is _____

Solving Quadratic Inequalities Graphically

Let $f(x) = \frac{1}{4}x^2 - \frac{4}{3}x - 5$ and $g(x) = \frac{1}{5}x + 2$. Use graphing technology to determine the following.

a) What are the points of intersection for $f(x)$ and $g(x)$?

b) Solve $f(x) = g(x)$.

The solution set is _____

c) Solve $f(x) \geq g(x)$.

The solution set is _____

d) Solve $f(x) < g(x)$.

The solution set is _____