9.2 Quadratic Inequalities in One Variable

Review: Solve

a.) \( x - 5 > 6 \)

b.) \( 2x - 5 > 3 \)

c.) \( -3x + 2 < 6 \)

To solve quadratic inequalities:

a.) Replace the inequality sign with an “=“ and solve

b.) Sketch the graph and determine the region that will solve the inequality.
Example: Solve:

a.) $x^2 - 4x + 3 \geq 0$

b.) $-x^2 + 4x + 12 < 0$

c.) $2x^2 - 6x + 3 \geq 0$
d.) \( x^2 - 6x + 9 > 0 \)

e.) \( x^2 - 6x + 9 \leq 0 \)