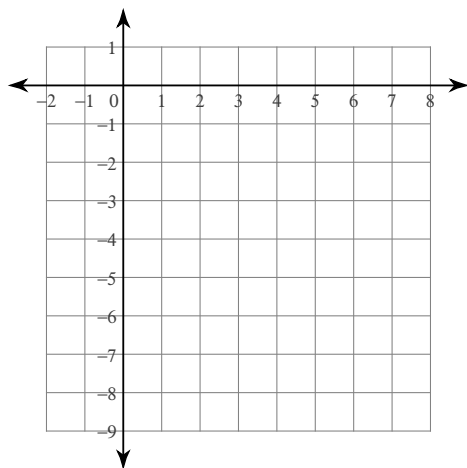


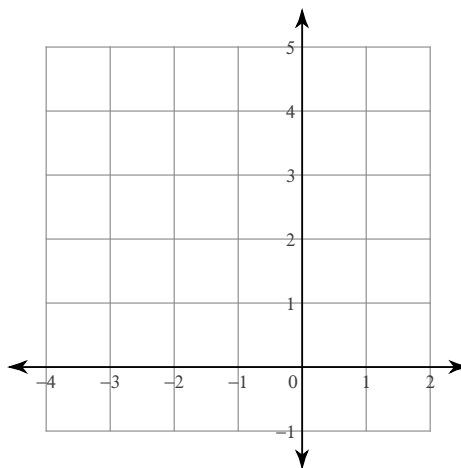
Quadratic Inequalities

Sketch the graph of each function.

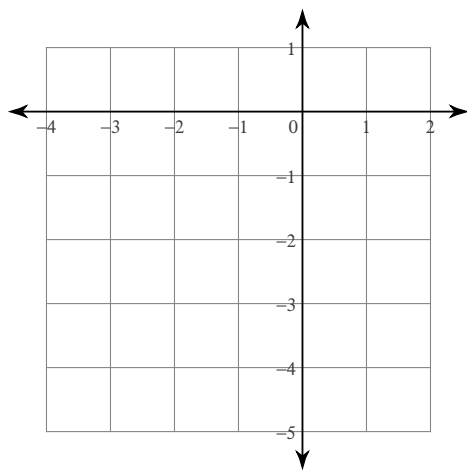
1) $y \geq -2x^2$



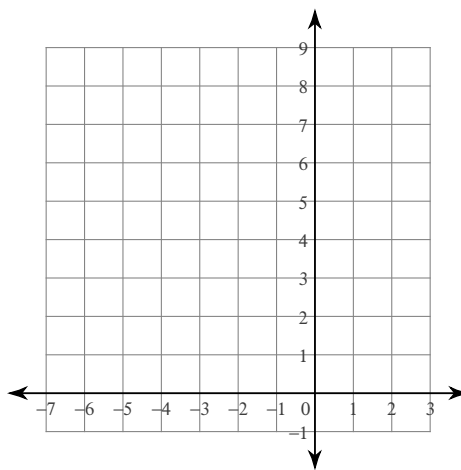
2) $y < x^2$



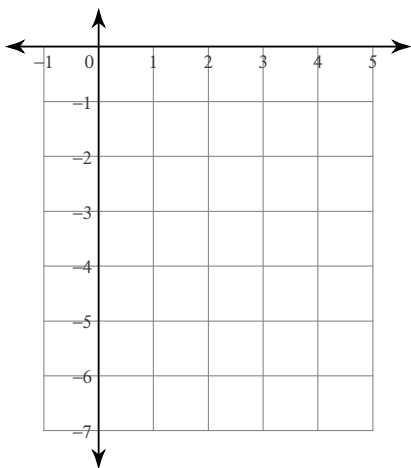
3) $y \leq -x^2$



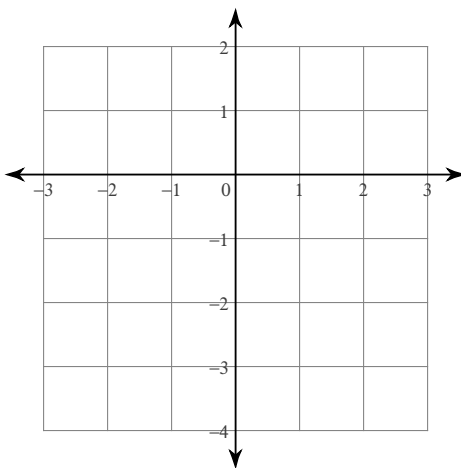
4) $y > 2x^2$



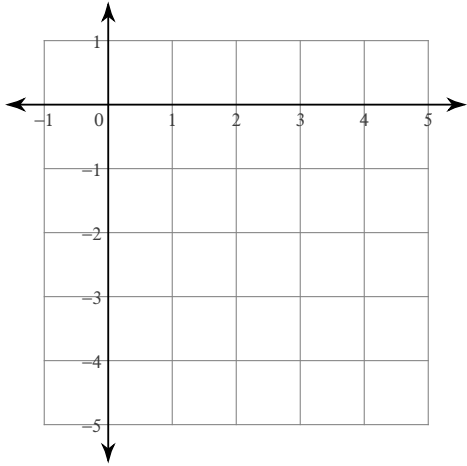
5) $y < -x^2 + 4x - 6$



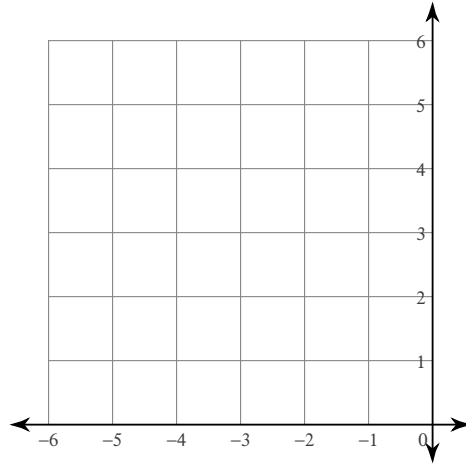
6) $y < x^2 + 2x - 2$



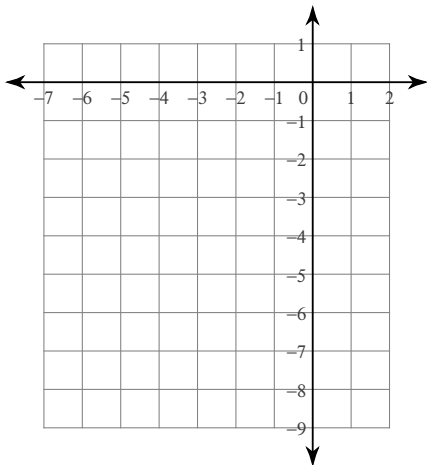
7) $y > x^2 - 6x + 5$



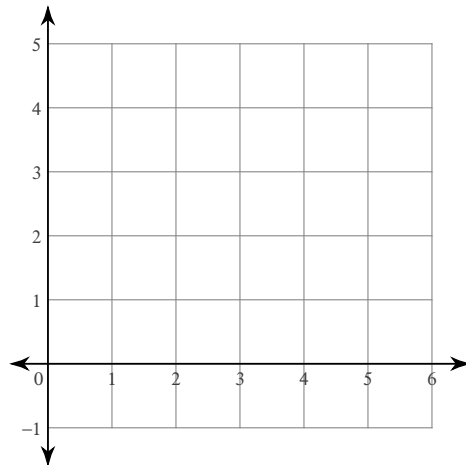
8) $y < x^2 + 6x + 10$



9) $y < -2x^2 - 18x - 41$



10) $y \leq -x^2 + 5x - 2$



Critical thinking questions:

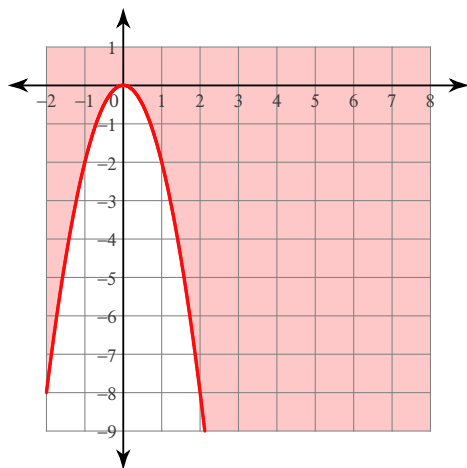
11) Name one solution to:
 $y > x^2 + 6x + 5$

12) Name one solution to the system:
 $y \geq x^2 - 2x + 2$
 $y = x + 1$

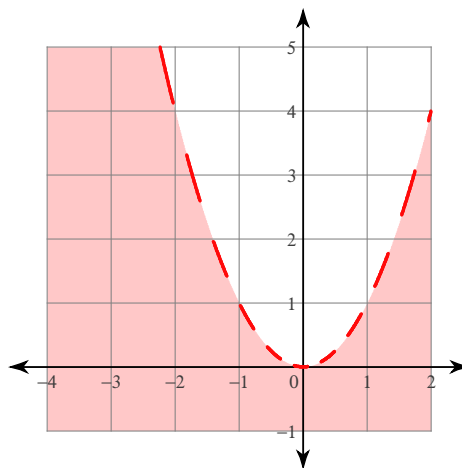
Quadratic Inequalities

Sketch the graph of each function.

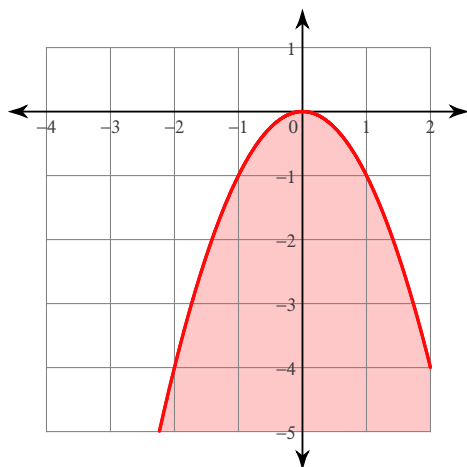
1) $y \geq -2x^2$



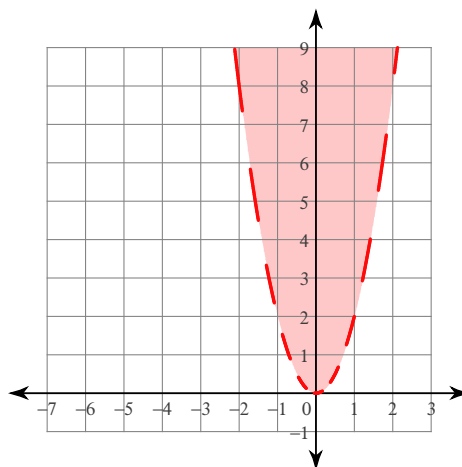
2) $y < x^2$



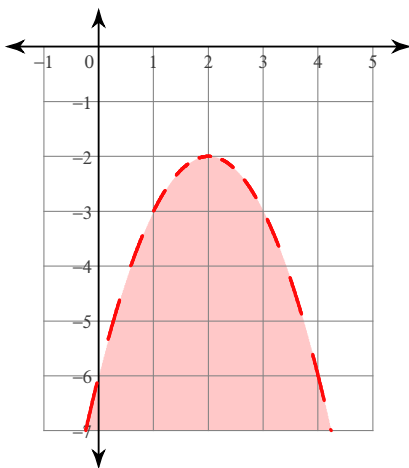
3) $y \leq -x^2$



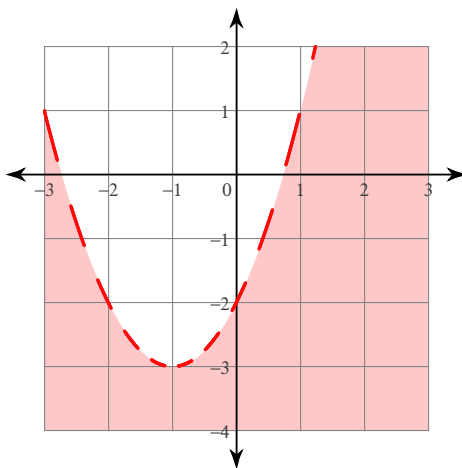
4) $y > 2x^2$



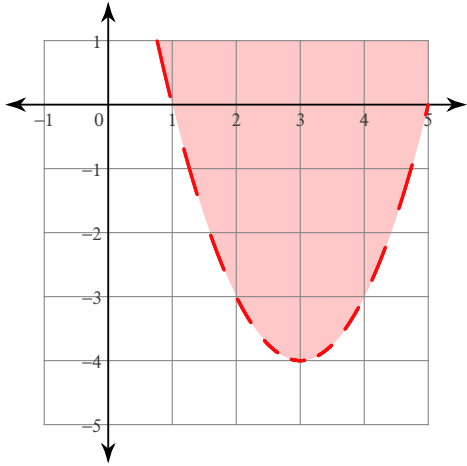
5) $y < -x^2 + 4x - 6$



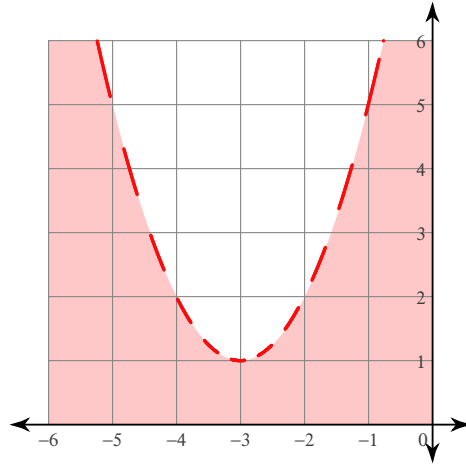
6) $y < x^2 + 2x - 2$



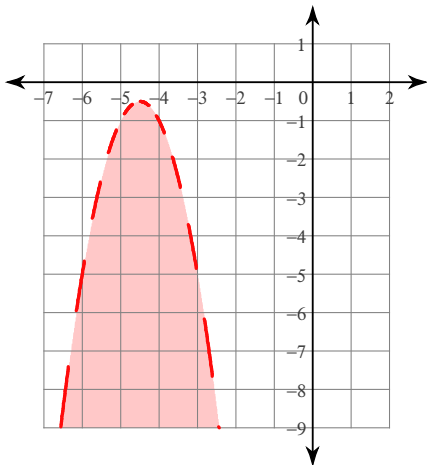
7) $y > x^2 - 6x + 5$



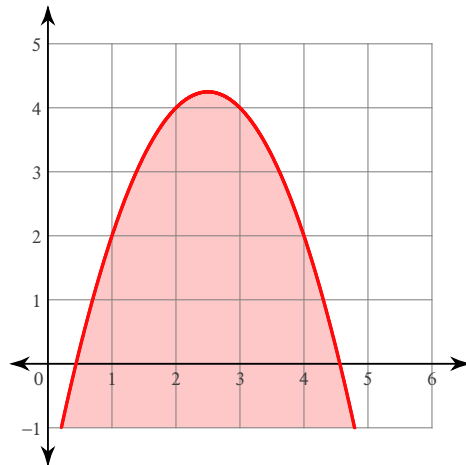
8) $y < x^2 + 6x + 10$



9) $y < -2x^2 - 18x - 41$



10) $y \leq -x^2 + 5x - 2$



Critical thinking questions:

11) Name one solution to:

$y > x^2 + 6x + 5$

Many answers. Ex: $(-3, 0)$

12) Name one solution to the system:

$y \geq x^2 - 2x + 2$

$y = x + 1$

Many answers. Ex: $(1, 2)$, or $(2, 3)$