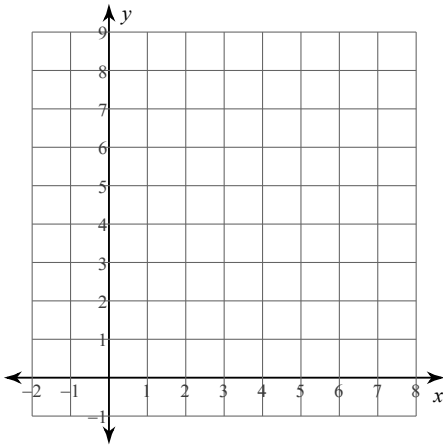


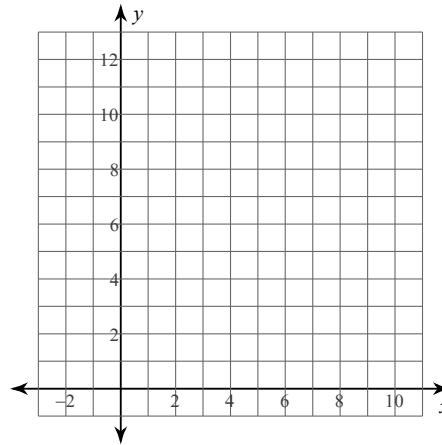
# Quadratic Inequalities

Sketch the graph of each function.

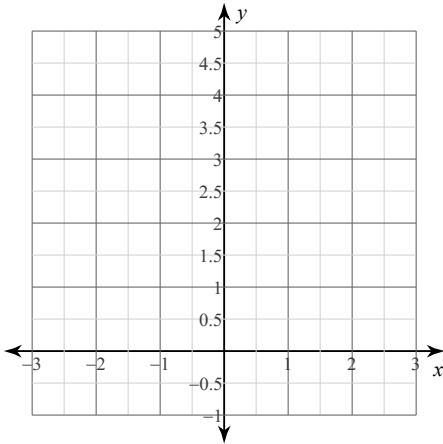
1)  $y \geq 2x^2$



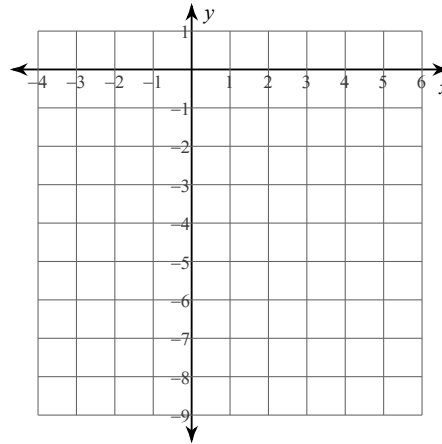
2)  $y > 3x^2$



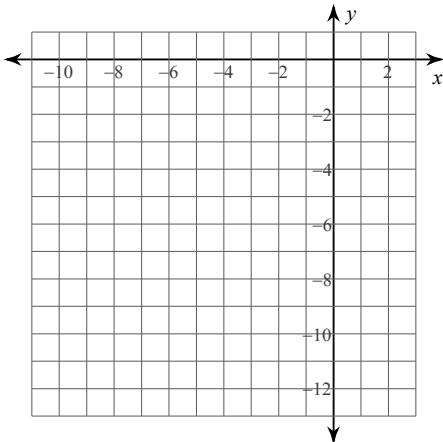
3)  $y > x^2$



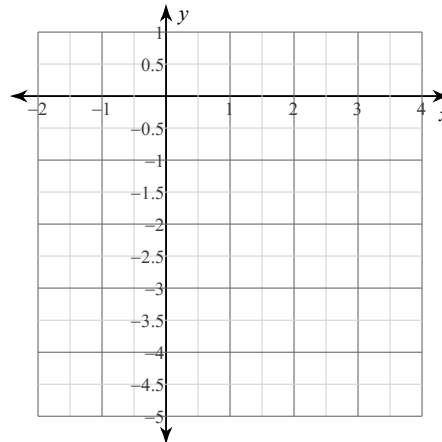
4)  $y < -2x^2$



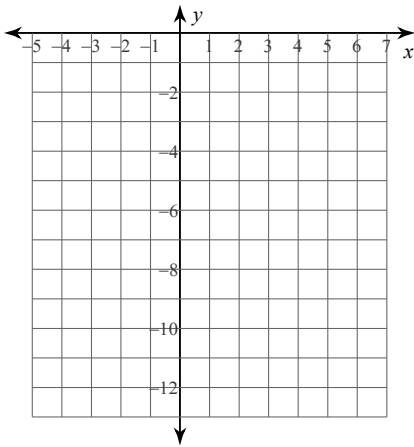
5)  $y \geq -3x^2$



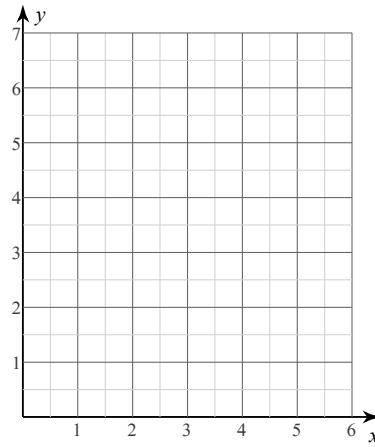
6)  $y \leq -x^2$



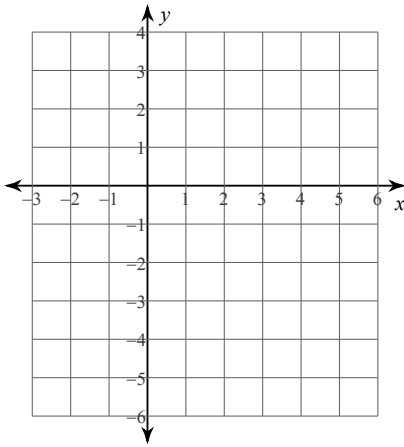
7)  $y < -2x^2 - 8x - 12$



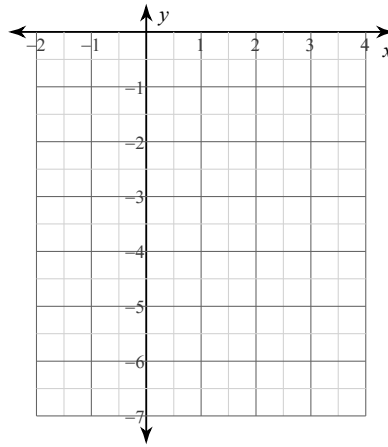
8)  $y \leq x^2 - 6x + 11$



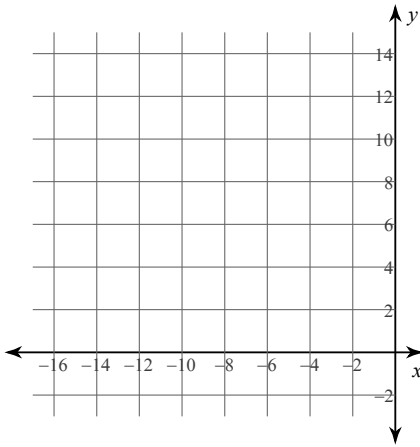
9)  $y \geq -2x^2 + 16x - 29$



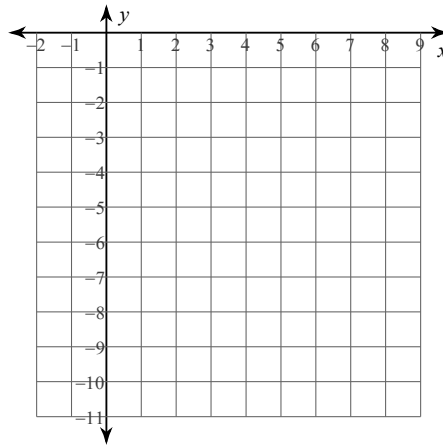
10)  $y > -x^2 + 4x - 6$



11)  $y \leq 4x^2 + 32x + 62$



12)  $y > -2x^2 + 16x - 34$



**Critical thinking questions:**

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

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