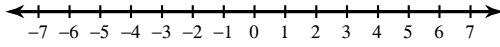


**Quadratic Inequalities**

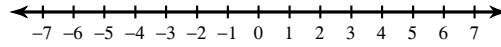
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**Draw a graph for each inequality.**

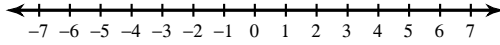
1)  $n \geq -1$



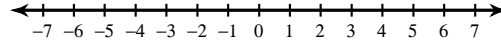
2)  $n > -4$



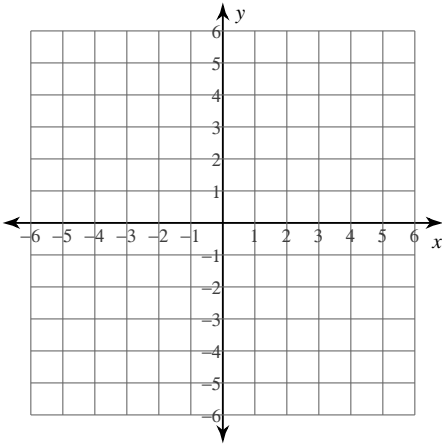
3)  $p > 3$



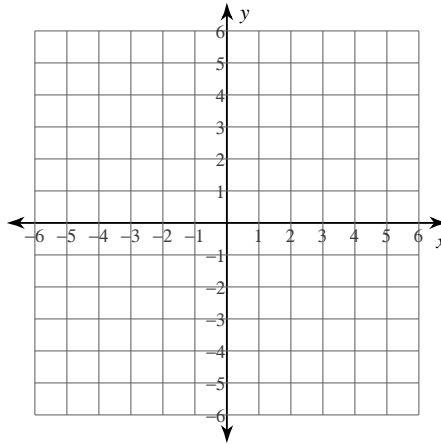
4)  $p > 6$

**Sketch the graph of each linear inequality.**

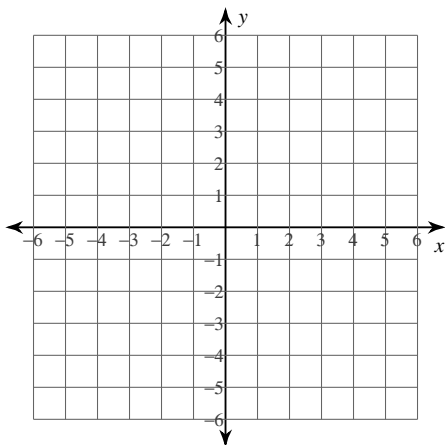
5)  $y \geq \frac{1}{2}x - 1$



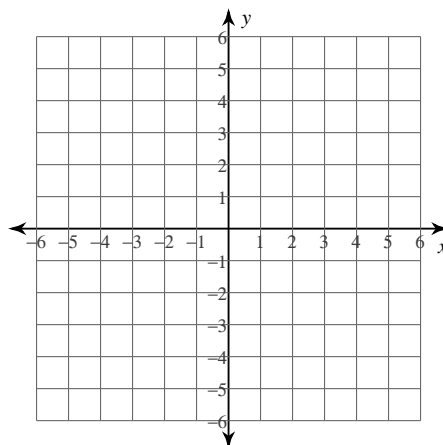
6)  $y < -\frac{2}{3}x$



$$7) y > -\frac{4}{3}x - 4$$

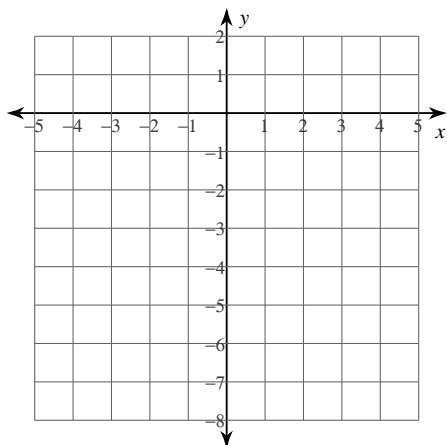


$$8) y \leq -x + 1$$

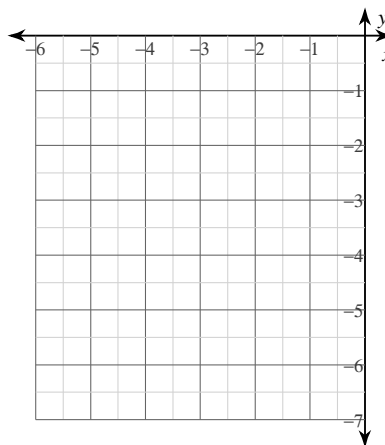


Sketch the graph of each function.

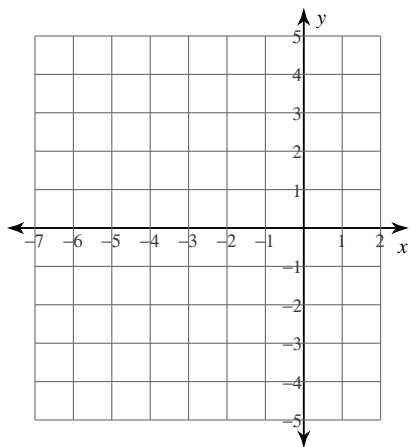
$$9) y > -2x^2 + 12x - 17$$



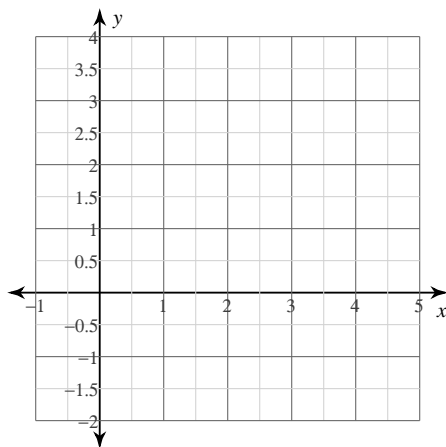
$$10) y < -x^2 - 6x - 11$$



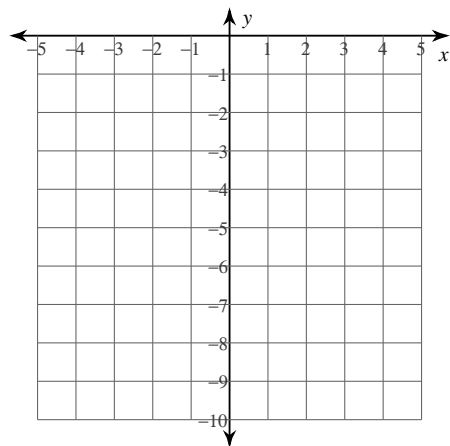
$$11) y > 2x^2 + 16x + 28$$



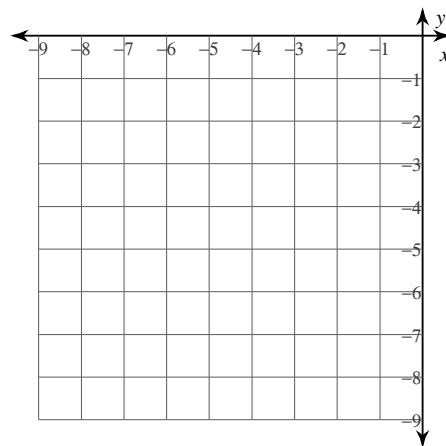
$$12) y \leq -x^2 + 2x + 2$$



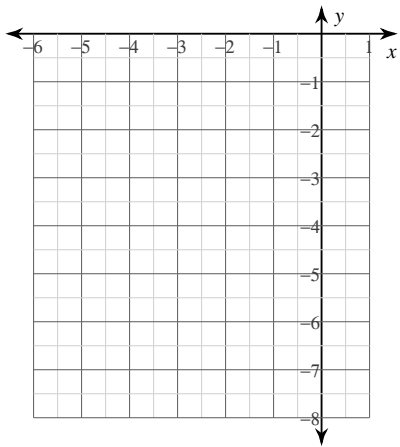
$$13) y > -2(x - 2)^2 - 1$$



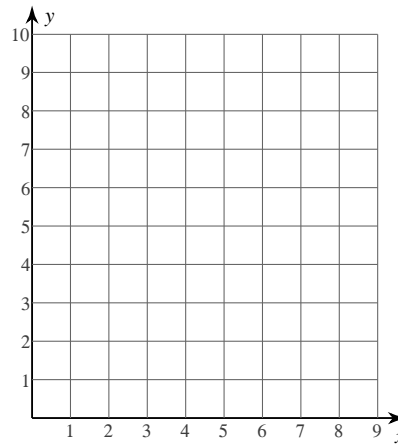
$$14) y \geq -(x + 4)^2 - 4$$



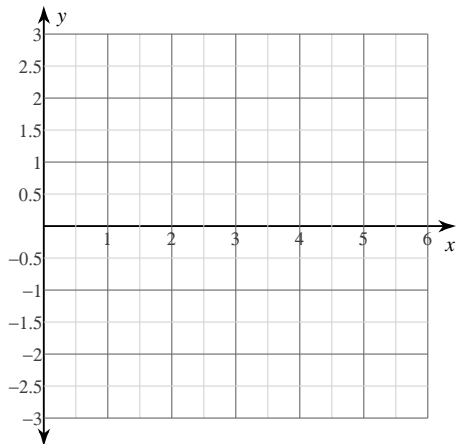
$$15) y \geq -(x+4)^2 - 3$$



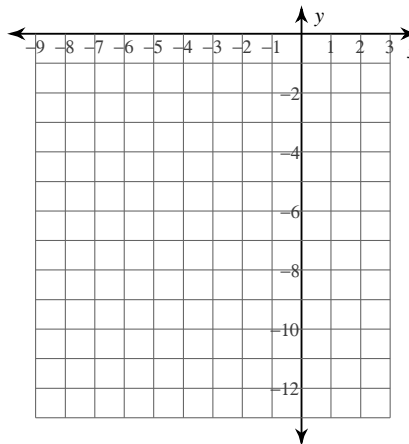
$$16) y < 2(x-4)^2 + 1$$



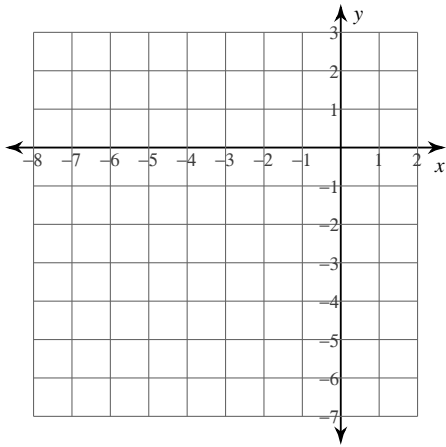
$$17) y \geq (x-3)^2 - 2$$



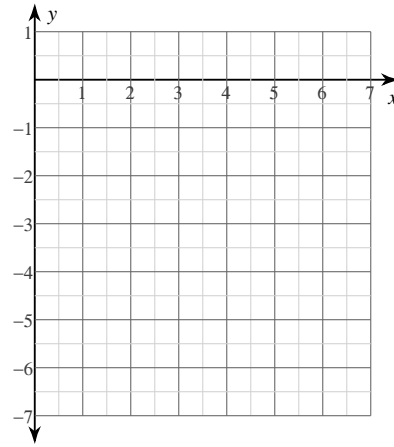
$$18) y \leq -2(x+3)^2 - 4$$



$$19) y > -2(x+3)^2 + 2$$



$$20) y < -(x-4)^2 - 1$$



**Solve each equation.**

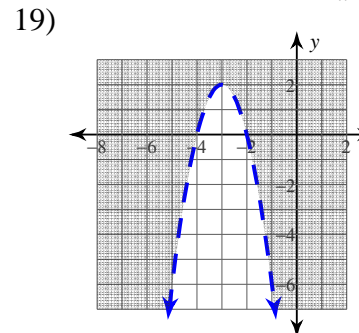
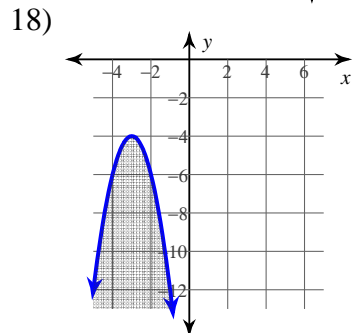
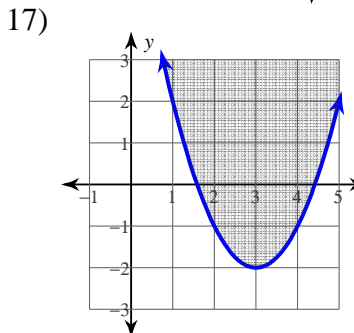
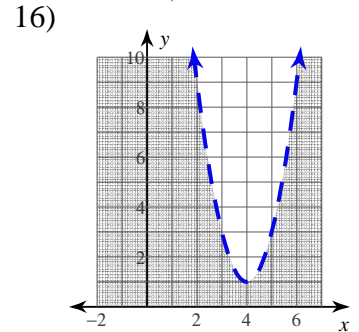
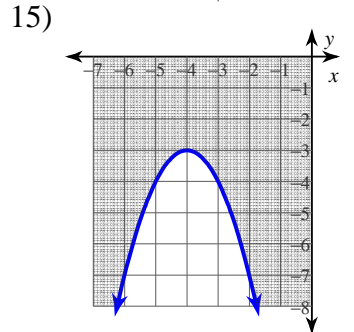
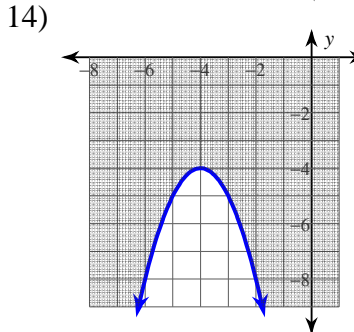
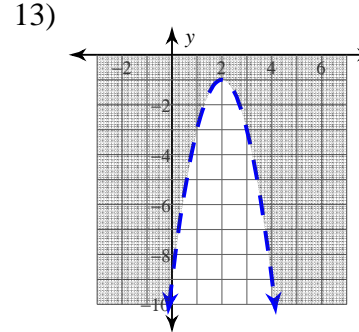
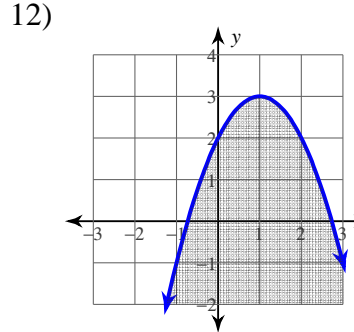
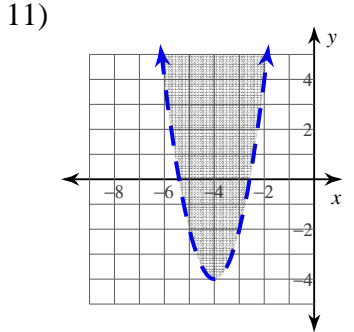
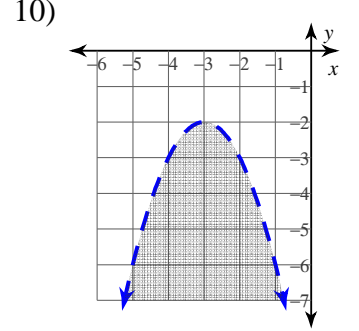
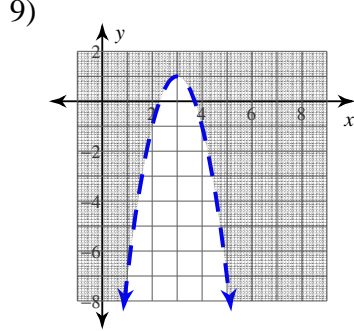
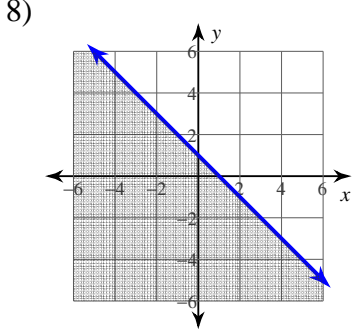
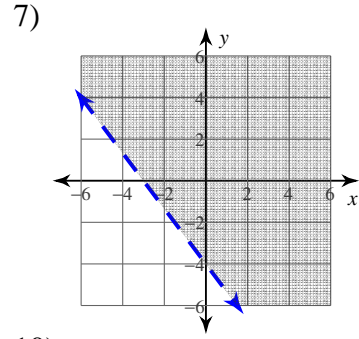
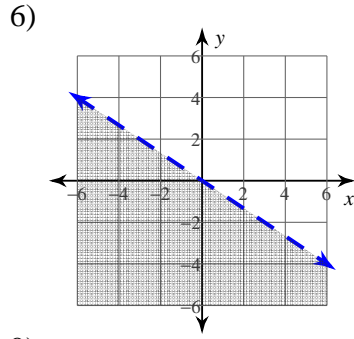
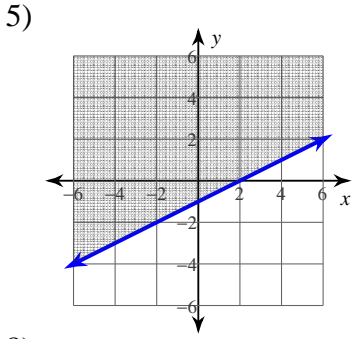
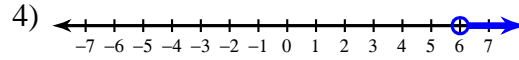
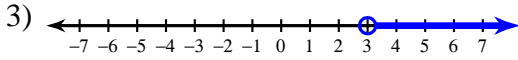
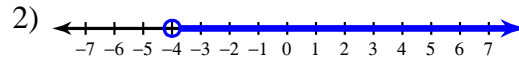
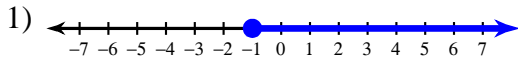
$$21) 5r^2 - 110 = 3r$$

$$22) 3n^2 - 88 = 10n$$

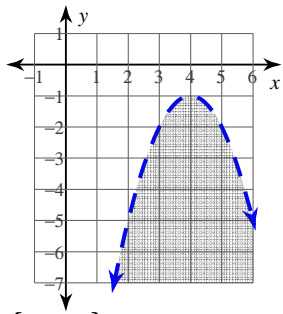
$$23) 4x^2 = 4$$

$$24) 6m^2 - m = 35$$

# Answers to Quadratic Inequalities (ID: 1)



20)



21)  $\{5, -4.4\}$

22)  $\{7.333, -4\}$

23)  $\{1, -1\}$

24)  $\{2.5, -2.333\}$