SATPREP
Quadratic equation

Name_____

Date_____

Change into vertex- intercept (completing square time)

1) $x = -y^2 + 14y - 59$

2) $x = -2y^2 + 4y + 3$

3) $x = -y^2 + 16y - 73$

4) $x = \frac{3}{5}y^2 - \frac{6}{5}y - \frac{42}{5}$

5) $x = -2y^2 - 28y - 92$

6) $x = -y^2 - 4y - 11$

7) $x = -2y^2 - 40y - 191$

8) $x = \frac{1}{2}y^2 - 6y + 22$

Find solutions of each inequality.(Consider y = 0)

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

10) $y < x^2 + 8x + 20$

11) $y < x^2 + 2x + 2$

12) $y \leq x^2 - 4x + 7$

Answers to Quadratic equation

1) $x = -(y-7)^2 - 10$

2) $x = -2(y-1)^2 + 5$

3) $x = -(y-8)^2 - 9$

4) $x = \frac{3}{5}(y-1)^2 - 9$

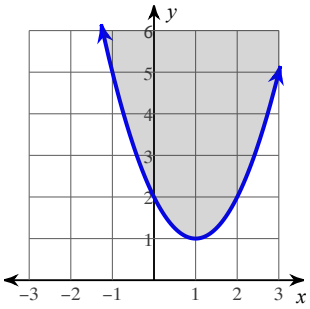
5) $x = -2(y+7)^2 + 6$

6) $x = -(y+2)^2 - 7$

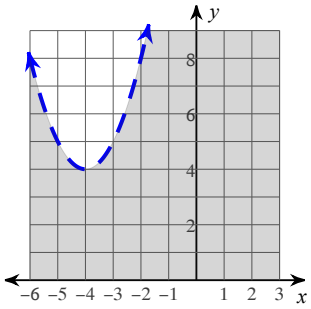
7) $x = -2(y+10)^2 + 9$

8) $x = \frac{1}{2}(y-6)^2 + 4$

9)



10)



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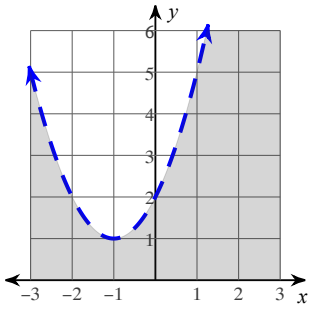

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