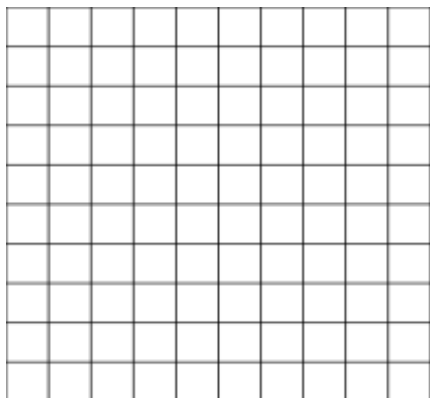


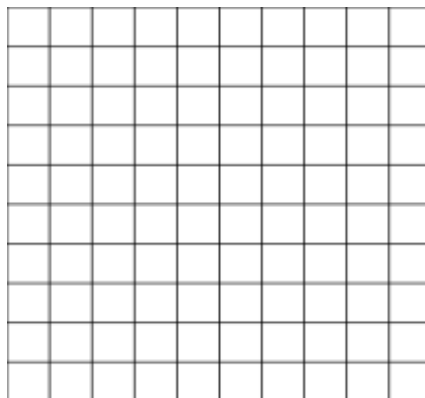
Solving Quadratic Equations Assignment

Find the solution of each equation by graphing the related function or mention if the equation has no solution.

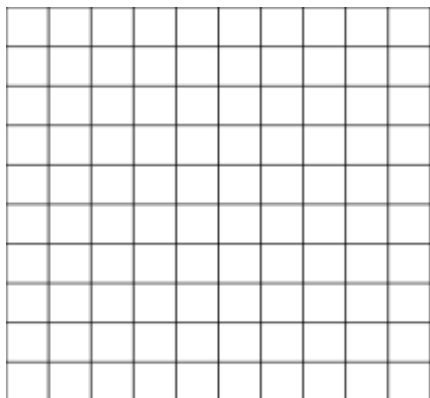
1. $x^2 - 16 = 0$



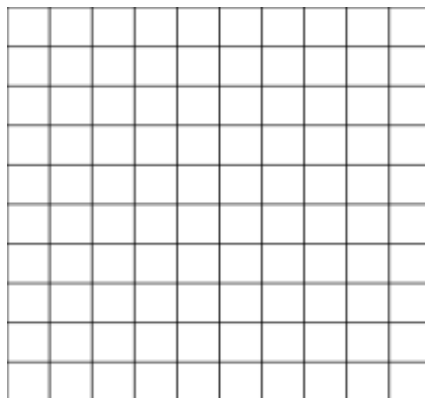
2. $x^2 + 2 = 0$



3. $x^2 + 6x + 9 = 0$



4. $x^2 - 15 = -15$



Name: _____ Period: _____ Date: _____

Solving Quadratic Equations Assignment

Find the solution of each equation by finding the square roots or mention if the equation has no solution.

1. $4b^2 - 36 = 0$

2. $x^2 + 144 = 0$

3. $x^2 + 6x + 9 = 0$

4. $y^2 - 10 = -15$

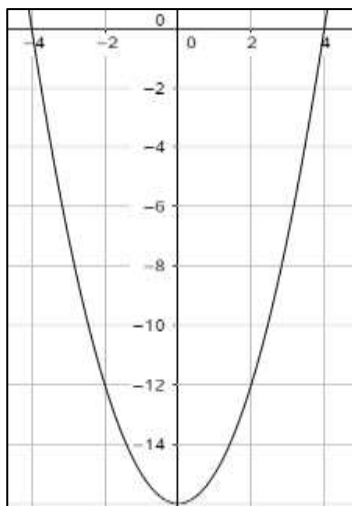
5. $2g^2 - 16 = -16$

6. $t^2 - 144 = 0$

Solving Quadratic Equations Assignment

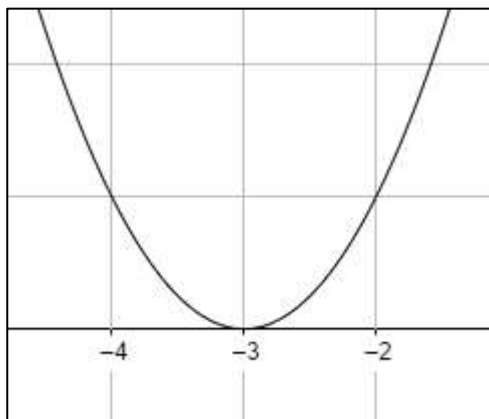
ANSWERS: Find the solution of each equation by graphing the related function or mention if the equation has no solution.

1. $x^2 - 16 = 0$



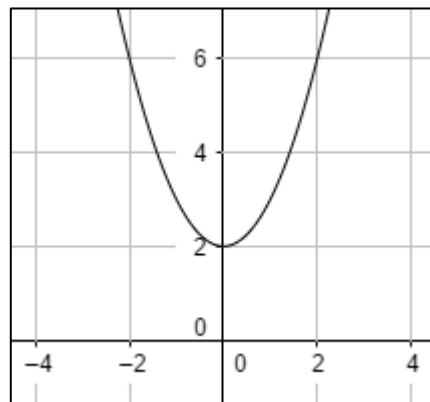
Solutions: $x = -4, 4$

3. $x^2 + 6x + 9 = 0$



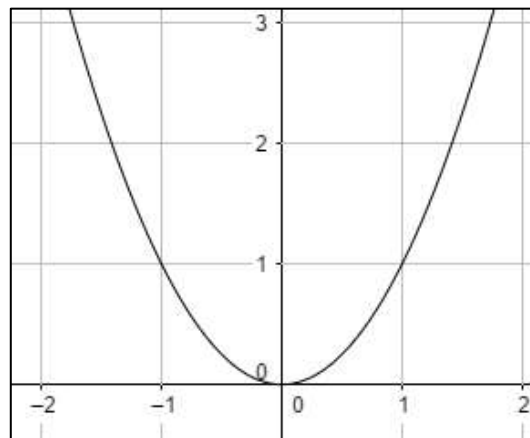
Solutions: $x = -3$

2. $x^2 + 2 = 0$



Solutions: No solution

4. $x^2 - 15 = -15$



Solutions: $x = 0$

Solving Quadratic Equations Assignment

Find the solution of each equation by finding the square roots or mention if the equation has no solution.

1. $4b^2 - 36 = 0$

$$b^2 = \frac{36}{4} = 9$$

$$\sqrt{b^2} = \sqrt{9}$$

$$b = \pm 3$$

2. $x^2 + 144 = 0$

$$x^2 = -144$$

$$\sqrt{x^2} = \sqrt{-144} \neq \text{a real number}$$

No solution exists

3. $x^2 + 6x + 9 = 0$

$$(x + 3)^2 = 0$$

$$\sqrt{(x + 3)^2} = \sqrt{0}$$

$$x + 3 = 0$$

$$x = -3$$

4. $y^2 - 10 = -15$

$$y^2 = +10 - 15 = -5$$

$$\sqrt{y^2} = \sqrt{-5} \neq \text{a real number}$$

No solution exists

5. $2g^2 - 16 = -16$

$$2g^2 = 16 - 16 = 0$$

$$g^2 = 0$$

$$\sqrt{g^2} = \sqrt{0}$$

$$g = 0$$

6. $t^2 - 144 = 0$

$$t^2 = 144$$

$$\sqrt{t^2} = \sqrt{144}$$

$$t = \pm 12$$