

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

## Solving Quadratic Equations Bell Work

Find the solution of each quadratic equation or mention if there is no solution.

1)  $y = 4x^2 - 9$

2)  $y = x^2 + 2$

3)  $y = x^2 + 2x + 1$

4)  $y = -2x^2 + 18$

**Solving Quadratic Equations** Bell Work**Answer Key**

Find the solution of each quadratic equation or mention if there is no solution.

1)  $y = 4x^2 - 9$

$4x^2 - 9 = 0$

$x^2 = \frac{9}{4}$

$\sqrt{x^2} = \sqrt{\frac{9}{4}}$

$x = \pm \frac{3}{2}$

2)  $y = x^2 + 2$

$x^2 + 2 = 0$

$x^2 = -2$

$\sqrt{x^2} = \sqrt{-2}$

**No solution exists**

3)  $y = x^2 + 2x + 1$

$x^2 + 2x + 1 = 0$

$(x + 1)^2 = 0$

$\sqrt{(x + 1)^2} = \sqrt{0}$

$x + 1 = 0$

$x = -1$

4)  $y = -2x^2 + 18$

$-2x^2 + 18 = 0$

$-2x^2 = -18$

$x^2 = 9$

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

$x = \pm 3$