

Algebra I

BW - Completing the Square

1.)  $x^2 - 2x - 15 = 0$

$$\begin{array}{r} +15 \quad +15 \\ \hline x^2 - 2x = 15 \\ x^2 - 2x + 1 = 15 + 1 \\ (x-1)^2 = 16 \end{array}$$

$x-1 = \pm 4$

$x = \pm 4 + 1$

$= 5, -3$

3.)  $x^2 + 2x - 8 = 0$

$$\begin{array}{r} x^2 + 2x = 8 \\ x^2 + 2x + 1 = 8 + 1 \\ (x+1)^2 = 9 \end{array}$$

$x+1 = \pm 3$

$x = 2, -4$

Algebra I

BW - Completing the Square

1.)  $x^2 - 2x - 15 = 0$

3.)  $x^2 + 2x - 8 = 0$

May 16<sup>th</sup>, 2017

ANSWERS

2.)  $x^2 + 2x = 35$

$$\begin{array}{r} x^2 + 2x + 1 = 35 + 1 \\ (x+1)^2 = 36 \end{array}$$

$x+1 = \pm 6$

$x = 7, -5$

4.)  $x^2 - 2x - 1 = 2$

$$\begin{array}{r} +1 \quad +1 \\ x^2 - 2x = 3 \\ x^2 - 2x + 1 = 3 + 1 \\ (x-1)^2 = 4 \end{array}$$

$x = 3, -$

$x-1 = \pm 2$

May 16<sup>th</sup>, 2017

2.)  $x^2 + 2x = 35$

4.)  $x^2 - 2x - 1 = 2$