Algebra 1: 12.7   **Name** _____ **Period** _____
Completing the Square Warm Up

Solve each quadratic equation by completing the square. Round to the nearest 100th!

1. $x^2 + 8x + 1 = 0$

$-1 \quad -1$

$x^2 + 8x + \underline{\hspace{0.7cm}} = -1 + \underline{\hspace{1cm}}$

$(x \quad)^2 = \underline{\hspace{1cm}}$

$\sqrt{(x \quad)^2} = \pm\sqrt{\underline{\hspace{1.5cm}}}$

$\underline{\hspace{2cm}} = \pm\sqrt{\underline{\hspace{1cm}}}$

$x = \underline{\hspace{1cm}} \pm \sqrt{\underline{\hspace{1.5cm}}}$

$x \approx \underline{\hspace{2cm}}, x \approx \underline{\hspace{1.5cm}}$

2. $x^2 - 12x - 28 = 0$

$+28 \quad +28$

$x^2 - 12x + \underline{\hspace{0.7cm}} = 28 + \underline{\hspace{1cm}}$

$(x \quad)^2 = \underline{\hspace{1cm}}$

$\sqrt{(x \quad)^2} = \pm\sqrt{\underline{\hspace{1.5cm}}}$

$\underline{\hspace{2cm}} = \pm\sqrt{\underline{\hspace{1cm}}}$

$x = \underline{\hspace{1cm}} \pm \sqrt{\underline{\hspace{1.5cm}}}$

$x = \underline{\hspace{2cm}}, x = \underline{\hspace{1.5cm}}$