Find the EXACT solutions to this equation:

$(x + 5)^2 + 1 = 37$

$-1 \quad -1$

$\sqrt{(x+5)^2} = \sqrt{36}$

$x + 5 = \pm 6 \rightarrow$

$x + 5 = 6 \rightarrow x = 1$

$-5 \quad -5$

$x + 5 = -6 \rightarrow x = -11$

Find the EXACT solutions to this equation:

$(x - 6)^2 - 14 = 3$

$+14 \quad +14$

$\sqrt{(x-6)^2} = \sqrt{17}$

$x - 6 = \pm\sqrt{17}$

$+6 \quad +6$

$x = \pm\sqrt{17} + 6$ or $6 \pm \sqrt{17}$

Find the EXACT solutions to this equation:

$2(x + 1)^2 + 3 = 51$

$-3 \quad -3$

$\frac{2(x+1)^2}{2} = \frac{48}{2}$

$\sqrt{(x+1)^2} = \sqrt{24}$

$x + 1 = \pm 2\sqrt{6}$

-1

$x = -1 \pm 2\sqrt{6}$ or $\pm 2\sqrt{6} - 1$

Find the EXACT solutions to this equation:

$(2x - 1)^2 + 83 = 132$

$-83 \quad -83$

$\sqrt{(2x-1)^2} = \sqrt{49}$

$2x - 1 = \pm 7$

$2x - 1 = 7$

$x = 4$

$2x - 1 = -7$

$x = -3$

x = -3, 4

Standard Form of a Quadratic Function:

$y = ax^2 + bx + c$

Standard Form of a Quadratic Equation:

$0 = ax^2 + bx + c$