WAY COOL ALGEBRA

Quadratics with $\sqrt{Radical}$ Answers

Completing the Square

Solve each Quadratic by <mark>Completing the Square (1 – 15)</mark> .

These problems already have Perfect Square Trinomials.

1) $a^2 + 2a + 1 = 121$	2) $16y^2 + 24y + 9 = 121$	3) $36v^2 - 12v + 1 = 49$
4) $9w^2 + 24w + 16 = 36$	5) $25g^2 - 20g + 4 = 75$	6) $4a^2 + 8a + 4 = 60$

Make each problem into a Perfect Square Trinomial, Factor, and then use Square Roots.

7) $m^2 - 14m = -13$	8) $k^2 - 4k = 45$	9) $n^2 - 6n = 59$
10) $c^2 + 30c = -50$	11) $w^2 + 6w + 7 = 14$	12) $g^2 - 26g + 162 = -6$
13) $x^2 + 5x = -6$	14) $y^2 - 7y + 23 = 13$	15) $p^2 - 9p - 18 = -8$