

WAY TWO COOL ALGEBRA

Parabolas - Formulas

Discriminant

Use the **Discriminant** to determine the number of **Solutions**.

Be sure that the given problem is in **Standard Form**.

1) $y = 2x^2 + 3x - 2$	2) $y = x^2 - 2x + 4$	3) $y = -2x^2 + 4x - 2$
4) $y = 2x^2 + 2x + 6$	5) $y = 5x^2 + 2x - 3$	6) $y = 3x^2 - 6x + 3$
7) $2x^2 + 3x - 2 = 0$	8) $x^2 - 2x + 4 = 0$	9) $6x^2 - 2x + 4 = 0$
10) $3x^2 - 6x + 3 = 0$	11) $4x^2 - 5x + 1 = 0$	12) $-5x^2 + 6x - 6 = 0$
13) $-2x^2 - 5x + 3 = 0$	14) $3x^2 + 6x - 8 = 0$	15) $x^2 + 10 = 0$
16) $5x^2 + 3x = 12$	17) $2x^2 + 8x = -8$	18) $7 - 5x^2 + 9x = x$
19) $-x = 7x^2 + 4$	20) $2x = x^2 - x$	21) $-2 - x^2 = 4x^2$