

WAY TWO COOL ALGEBRA

Parabolas - Formulas

Vertex

Find the **Vertex** of the quadratic's **parabola**. (Do not graph.)

1) $y = 3x^2$	2) $y = 6x^2$	3) $y = -12x^2$
4) $y = 2x^2 - 10x$	5) $y = -7x^2 + 2x$	6) $y = 6x^2 + 2x + 4$
7) $y = 5x^2 + 10x + 7$	8) $y = -4x^2 - 4x + 8$	9) $y = -x^2 + 8x + 32$
10) $y = -2x^2$	11) $y = 4x^2$	12) $y = x^2 + 4x - 1$
13) $y = 4x^2 + 8x - 3$	14) $y = x^2 + x + 4$	15) $y = 3x^2 - 2x - 1$
16) $y = 2x^2 + 5x - 3$	17) $y = -4x^2 + 4x + 7$	18) $y = -3x^2 - 3x + 4$
19) $y = x^2 - 3$	20) $y = x^2 + x - 4$	21) $y = x^2 - 2x - 1$