

2/4/13 Quadratics in Standard form ($ax^2 + bx + c = 0$)

To put a quadratic into standard form, move everything over to the left side, and write in descending order.

Identify a, b, and c.

Ex

①

$$3x^2 + 7x - 8 = 0$$

$\begin{matrix} \uparrow & \uparrow & \uparrow \\ a & b & c \\ 3 & 7 & -8 \end{matrix}$

②

$$4x^2 - 3x + 1 = 0$$

$a=4 \quad b=-3 \quad c=1$

③

$$5x^2 + 2x = 33$$

$\begin{matrix} -33 & -33 \end{matrix}$

$$5x^2 + 2x - 33 = 0$$

$a=5 \quad b=2 \quad c=-33$

④

$$x^2 = x - 7$$

$\begin{matrix} +7 & +7 \end{matrix}$

$$x^2 + 7 = x$$

$\begin{matrix} -x & -x \end{matrix}$

$$x^2 + 7 - x = 0$$

\curvearrowright

$$x^2 - x + 7 = 0 \quad a=1 \quad b=-1 \quad c=7$$