WRITING QUADRATIC EQUATIONS IN STANDARD FORM

- Need some help identifying quadratic equations first?
  Identifying Quadratic Equations

A *quadratic equation* is an equation of the form $ax^2 + bx + c = 0$, where $a \neq 0$.
The form $ax^2 + bx + c = 0$ is called the **standard form** of the quadratic equation.

Notice that standard form is not unique.
For example, $x^2 - x + 1 = 0$ can be written as the equivalent equation $-x^2 + x - 1 = 0$.
Also, $4x^2 - 2x + 2 = 0$ can be written as the equivalent equation $2x^2 - x + 1 = 0$.

(more mathematical cats)

In this exercise, all answers are reported in the form $ax^2 + bx + c = 0$ with $a > 0$, and where the **greatest common factor of all nonzero coefficients is 1**.

In this exercise, you will practice writing quadratic equations in standard form.

EXAMPLES:

Question: Write $2x^2 = x + 4$ in standard form:
Answer: $2x^2 - x - 4 = 0$

Question: Write $3x = -x^2 + 7$ in standard form:
Answer: $x^2 + 3x - 7 = 0$

Question: Write $6x^2 - 6x = 12$ in standard form:
Answer: $x^2 - x - 2 = 0$

Question: Write $3x - 2 = 5x$ in standard form:
Answer: not a quadratic equation