

Solve **each** quadratic equations by **two** methods:

- (a) factoring (b) using the quadratic formula. $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

1) $2x^2 - 3x - 9 = 0$	2) $5x^2 + 6x = 8$	*get = 0 first	3) $8x^2 - 4x + 5 = 2x + 4$
------------------------	--------------------	-------------------	-----------------------------

Jumbled Answers: $\frac{4}{5}$ $\frac{1}{4}$ -2 $\frac{1}{2}$ 3 4 $\frac{-3}{2}$

Solve each quadratic equation by any **one** method. Some cannot be factored and will need the quadratic formula. Check answer below. Some can be solved using square roots. (don't forget the \pm)

4) $x^2 + 3x + 1 = 0$	5) $x^2 + 1 = 37$	6) $x^2 + 6x + 9 = 0$
7) $2x^2 - 1x - 5 = 0$	8) $3x^2 + 4 = x^2 + 104$	9) $3x^2 - 12 = -5x$
10) Challenge: $x^2 - 2x - 1 = 0$		Challenge: $x^2 - 6x + 3 = 0$

Jumbled Answers: -3 $3 \pm \sqrt{6}$ ± 6 $\frac{1 \pm \sqrt{41}}{4}$ $\frac{-3 \pm \sqrt{5}}{2}$ $-1 \pm \sqrt{2}$ $\pm 5\sqrt{2}$ $\frac{4}{3}$ -3

Graph each function:

11) $y = \frac{-2}{3}x + 4$	12) $3x - 4y = 8$	13) $y = -2$
-----------------------------	-------------------	--------------

Solve **each** quadratic equations by **two** methods:

- (a) factoring (b) using the quadratic formula. $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

1) $2x^2 - 3x - 9 = 0$	2) $5x^2 + 6x = 8$	*get = 0 first	3) $8x^2 - 4x + 5 = 2x + 4$
------------------------	--------------------	-------------------	-----------------------------

Jumbled Answers: $\frac{4}{5}$ $\frac{1}{4}$ -2 $\frac{1}{2}$ 3 4 $\frac{-3}{2}$

Solve each quadratic equation by any **one** method. Some cannot be factored and will need the quadratic formula. Check answer below. Some can be solved using square roots. (don't forget the \pm)

4) $x^2 + 3x + 1 = 0$	5) $x^2 + 1 = 37$	6) $x^2 + 6x + 9 = 0$
7) $2x^2 - 1x - 5 = 0$	8) $3x^2 + 4 = x^2 + 104$	9) $3x^2 - 12 = -5x$
10) Challenge: $x^2 - 2x - 1 = 0$		Challenge: $x^2 - 6x + 3 = 0$

Jumbled Answers: -3 $3 \pm \sqrt{6}$ ± 6 $\frac{1 \pm \sqrt{41}}{4}$ $\frac{-3 \pm \sqrt{5}}{2}$ $-1 \pm \sqrt{2}$ $\pm 5\sqrt{2}$ $\frac{4}{3}$ -3

Graph each function:

11) $y = \frac{-2}{3}x + 4$	12) $3x - 4y = 8$	13) $y = -2$
-----------------------------	-------------------	--------------