

Simplifying Radicals and Polynomials	Graphs of Quadratic Functions	Factoring	Finding Solutions	Completing the Square, Quadratic Formula	POTPOURRI
\$1	00	\$100	\$100	\$100	\$100
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		\$300	\$300	\$300	\$300
		\$400	\$400	\$400	\$400
		\$500	\$500	\$500	\$500
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Simplify.

$(2x^3 - 5x - 7x^2) + (3 - 6x^2 + 9x)$

Simplify the radical expression.



Simplify the expression. $\sqrt{-40}$

Write the Quadratic in standard form.

 $(3x - 2)^2$

Simplify.

 $3\sqrt{-48} \cdot 4i\sqrt{54}$

Find the x-intercepts of:

Y = (x + 3)(2x - 5)

Find the Vertex Form and Vertex of the quadratic equation: $y = 2x^2 - 4x - 2$

Find the x- intercept(s) of: $y = x^2 - 2x + 1$

Find the zeros of: $y = 5x^2 - 80$

Find the vertex form and vertex of:

$Y = 2x^2 + 4x - 10$

Factor:

 $x^2 - 7x - 30$

Factor Completely:

 $36x^2 - 4x$

Factor completely. (Be careful!!) DALLOUBLE $6x^2 + 32x - 24$

Factor

$8x^2 - 26x + 15$

Factor Completely:

 $1 - 81x^4$

Solve:

0 = (x - 4)(2x + 3)

Find the zeros:

$2x^2 = 144$

Solve by factoring:

 $0 = 3x^3 - 75x$

Find the x-intercept(s) of the quadratic equation:

$$2x^2 + 16x = -32$$

 $\frac{\text{Solve}}{14} = \frac{1}{2}(x+8)^2$

Find the value of c that makes the expression a perfect square trinomial. Then write the expression as the square of a binomial.

 $x^2 + 10x - c$

Solve the equation by completing the square.

$$x^2 - 16x - 2 = 0$$

Solve with Quadratic Formula.



Solve by completing the square.

 $5x^2 + 10x = -3$

Use the quadratic formula to solve the equation.

$x^2 + 29 = -4x$

Use the discriminant to give the number and type of zeros.

 $-2x^2 - 7 = -3x$

A model rocket will be launched from a hill 80 feet above sea level. The launch site is next to the ocean (sea level) and the rocket will fall into the ocean. The rocket's distance s, above sea level at any time, t, is found by the equation $s = -16t^2 + 64t + 80$. Find the time it takes for the rocket to strike the ocean.

Describe the nature of the roots of

$5x^2 + 3 = -10x$

The length Joe's kitchen floor is 4 feet more than the width. The area is 117 square feet. What are the dimensions of Joe's kitchen?

A rectangular prism has a length that is five less than the width. The volume of the prism is $2x^3 - 7x^2 - 15x$. Find the height of the prism.



An equation of a quadratic that has the solutions -1/2 and 7.

(written in standard form)