

<u>Solving By Factoring</u>	<u>Solving By Quadratic Formula</u>	<u>Solving By Taking Square Roots</u>
<div>Glue Description of Method Here</div>	<div>Glue Description of Method Here</div>	<div>Glue Description of Method Here</div>
<div>Example 1:</div> <div>Glue Equation Here</div>	<div>Example 1:</div> <div>Glue Equation Here</div>	<div>Example 1:</div> <div>Glue Equation Here</div>
<div>Glue Solution(s) Here</div>	<div>Glue Solution(s) Here</div>	<div>Glue Solution(s) Here</div>

<u>Factoring continued</u>	<u>Quadratic Formula continued</u>	<u>Square Roots continued</u>
<p data-bbox="1416 100 1448 256"><u>Example 2:</u></p> <div data-bbox="1328 283 1448 709" style="border: 1px dashed black; padding: 10px; text-align: center;">Glue Equation Here</div> <div data-bbox="630 128 743 451" style="border: 1px dashed black; padding: 10px; text-align: center;">Glue Solution(s) Here</div> <div data-bbox="138 107 548 699" style="border: 1px dashed black; padding: 10px; text-align: center;">Glue the case when you use this method here.</div>	<p data-bbox="1416 751 1448 907"><u>Example 2:</u></p> <div data-bbox="1328 945 1448 1371" style="border: 1px dashed black; padding: 10px; text-align: center;">Glue Equation Here</div> <div data-bbox="636 772 750 1096" style="border: 1px dashed black; padding: 10px; text-align: center;">Glue Solution(s) Here</div> <div data-bbox="138 772 555 1392" style="border: 1px dashed black; padding: 10px; text-align: center;">Glue the case when you use this method here.</div>	<p data-bbox="1416 1430 1448 1585"><u>Example 2:</u></p> <div data-bbox="1344 1623 1458 2049" style="border: 1px dashed black; padding: 10px; text-align: center;">Glue Equation Here</div> <div data-bbox="641 1455 755 1778" style="border: 1px dashed black; padding: 10px; text-align: center;">Glue Solution(s) Here</div> <div data-bbox="138 1423 555 2022" style="border: 1px dashed black; padding: 10px; text-align: center;">Glue the case when you use this method here.</div>

DESCRIPTION OF METHODS

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Step 1: Isolate the squared term.

Step 2: Take the square root of each side. Don't forget the \pm .

Step 3: Simplify the radical.

Step 4: Get x by itself.

The process of finding the roots of a quadratic equation by finding two integers that multiply to give the product of ac and add to give the sum of b . Don't forget to set each factor equal to zero before solving!

WHEN TO USE EACH METHOD

$$b = 0$$

OR

the quadratic is
in "vertex form"

$$a = 1$$

$$a \neq 1$$

SOLUTIONS

$x = 3 \pm 5i\sqrt{2}$	$x = \frac{-2 \pm i\sqrt{2}}{3}$
$x = 1 \pm \sqrt{6}$	$x = 7 \text{ and } x = 9$
$x = -8 \text{ and } 7$	$x = \pm 6\sqrt{2}$

EQUATIONS

$x^2 + x - 56 = 0$	$3x^2 - 4 = 212$
$(x - 3)^2 + 10 = -40$	$2x^2 - 4x - 10 = 0$
$3x^2 + 4x + 2 = 0$	$x^2 - 16x + 63 = 0$

