Alg

PREVIEW   CLOSE

Quiz: Complex Numbers and Discriminants

Question 1a of 15 (1 Using The Quadratic Formula to Solve Quadratic Equations 91330)

Maximum Attempts:	1
Question Type:	Multiple Response
Maximum Score:	2
Question:	Which of the following statements *must* be true of an equation before you can use the quadratic formula to find the solutions?

Check all that apply.

Correct Answers:

	Choice
*A.	There can be no term whose degree is higher than 2.
*B.	The coefficient of the x^2-term can't be 0.
C.	The coefficient of the x-term must be positive.
*D.	One side of the equation must be 0.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: There can be no term whose degree is higher than 2, The coefficient of the x^2-term can't be 0, and One side of the equation must be 0.

Question 1b of 15 (1 Using The Quadratic Formula to Solve Quadratic Equations 297698)

Maximum Attempts:	1
Question Type:	Multiple Response
Maximum Score:	2
Question:	Which of the following statements *must* be true of an equation before you can use the quadratic formula to find the solutions?

Check all that apply.

Correct Answers:

	Choice
*A.	There can be no term whose degree is higher than 2.
*B.	The coefficient of the x^2-term can't be 0.
C.	The coefficient of the x-term must be positive.
*D.	One side of the equation must be 0.

Attempt	Incorrect Feedback
1st	

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	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: There can be no term whose degree is higher than 2, The coefficient of the x^2-term can't be 0, and One side of the equation must be 0.

Question 1c of 15 (1 Using The Quadratic Formula to Solve Quadratic Equations 297699)

Maximum Attempts:	1
Question Type:	Multiple Response
Maximum Score:	2
Question:	Which of the following statements *must* be true of an equation before you can use the quadratic formula to find the solutions?

Check all that apply.

Correct Answers:

	Choice
*A.	There can be no term whose degree is higher than 2.
*B.	The coefficient of the x^2-term can't be 0.
C.	The coefficient of the x-term must be positive.
*D.	One side of the equation must be 0.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: There can be no term whose degree is higher than 2, The coefficient of the x^2-term can't be 0, and One side of the equation must be 0.

Question 2a of 15 (2 Using The Quadratic Formula to Solve Quadratic Equations 91331)

Maximum Attempts:	1
Question Type:	Multiple Response
Maximum Score:	2
Question:	After being rearranged and simplified, which of the following equations could be solved using the quadratic formula?

Check all that apply.

Correct Answers:

	Choice
A.	$2x^2 - 3x + 10 = 2x^2 + 21$
*B.	$x^2 - 6x - 7 = 2x$
*C.	$5x^2 - 3x + 10 = 2x^2$
D.	$5x^3 + 2x - 4 = 2x^2$

Alg

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x^2 - 6x - 7 = 2x$ and $5x^2 - 3x + 10 = 2x^2$.

Question 2b of 15 (2 Using The Quadratic Formula to Solve Quadratic Equations 297700)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: After being rearranged and simplified, which of the following equations could be solved using the quadratic formula?

Check all that apply.

Correct Answers:

	Choice
*A.	$2x^2 - 3x + 10 = 2x + 21$
B.	$2x^2 - 6x - 7 = 2x^2$
C.	$5x^3 - 3x + 10 = 2x^2$
*D.	$5x^2 + 2x - 4 = 2x^2$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $2x^2 - 3x + 10 = 2x + 21$ and $5x^2 + 2x - 4 = 2x^2$.

Question 2c of 15 (2 Using The Quadratic Formula to Solve Quadratic Equations 297701)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: After being rearranged and simplified, which of the following equations could be solved using the quadratic formula?

Check all that apply.

Correct Answers:

	Choice
*A.	$5x^2 - 3x + 10 = 2x^2 + 21$
*B.	$x^2 - 6x - 7 = 2$
C.	$5x^2 - 3x + 10 = 5x^2$
D.	$5x^3 + 2x - 4 = 2x^2$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $5x^2 - 3x + 10 = 2x^2 + 21$ and $x^2 - 6x - 7 = 2$.

Question 3a of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 91332)

Maximum Attempts:	1
Question Type:	Multiple Response
Maximum Score:	2
Question:	Which of the following are solutions to the equation below?

Check all that apply.

$3x^2 - 5x + 1 = 0$

Correct Answers:

	Choice
*A.	$x = \dfrac{5 \quad \sqrt{}}{6}$
*B.	$x = \dfrac{5 + \sqrt{3}}{6}$
C.	$x = \dfrac{5 \quad \sqrt{37}}{6}$
D.	$x = \dfrac{-5 - \sqrt{13}}{5}$
E.	$x = \dfrac{-5 + \sqrt{3}}{6}$
F.	$x = \dfrac{5 + \sqrt{37}}{6}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x =$ and $x =$.

Alg

Question 3b of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 297702)

Maximum Attempts:	1
Question Type:	Multiple Response
Maximum Score:	2
Question:	Which of the following are solutions to the equation below?
	Check all that apply.
	$2x^2 - 5x + 1 = 0$

Correct Answers:

	Choice
*A.	$x = \dfrac{5 - \sqrt{7}}{4}$
*B.	$x = \dfrac{5 + \sqrt{17}}{4}$
C.	$x = \dfrac{-5 + \sqrt{7}}{4}$
D.	$x = \dfrac{-5 - \sqrt{7}}{4}$
E.	$x = \dfrac{5 + \sqrt{17}}{4}$
F.	$x = \dfrac{5 - \sqrt{17}}{4}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x = \dfrac{5 - \sqrt{17}}{4}$ and $x = \dfrac{5 + \sqrt{17}}{4}$.

Question 3c of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 297703)

Maximum Attempts:	1
Question Type:	Multiple Response
Maximum Score:	2
Question:	Which of the following are solutions to the equation below?
	Check all that apply.
	$1x^2 - 3x + 1 = 0$

Correct Answers:

Alg

	Choice
*A.	$x = \dfrac{3 - \sqrt{5}}{2}$
*B.	$x = \dfrac{3 + \sqrt{5}}{2}$
C.	$x = \dfrac{-7 + \sqrt{7}}{2}$
D.	$x = \dfrac{-3 - \sqrt{5}}{2}$
E.	$x = \dfrac{3 - \sqrt{3}}{2}$
F.	$x = \dfrac{3 + \sqrt{13}}{2}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x = \dfrac{3 - \sqrt{5}}{2}$ and $x = \dfrac{3 - \sqrt{5}}{2}$.

Question 4a of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 91333)

Maximum Attempts:	1
Question Type:	Multiple Response
Maximum Score:	2
Question:	Which of the following are solutions to the equation below?
	Check all that apply.
	$2x^2 + 3x - 5 = 0$

Correct Answers:

	Choice
A.	$x =$
*B.	$x = 1$
C.	$x = -1$
D.	$x =$
*E.	$x = -$
F.	$x =$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x = 1$ and $x = -\frac{3}{2}$.

Question 4b of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 297704)

Maximum Attempts:	1
Question Type:	Multiple Response
Maximum Score:	2
Question:	Which of the following are solutions to the equation below?

Check all that apply.

$5x^2 + 2x - 3 = 0$

Correct Answers:

	Choice
*A.	$x = \dfrac{3}{5}$
B.	$x = 1$
*C.	$x = -1$
D.	$x = \dfrac{\sqrt{4}}{5}$
E.	$x = \dfrac{-\sqrt{14}}{5}$
F.	$x = \dfrac{3 - 2\sqrt{2}}{5}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x =$ and $x = -1$.

Question 4c of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 297705)

Maximum Attempts:	1
Question Type:	Multiple Response
Maximum Score:	2
Question:	Which of the following are solutions to the equation below?

Check all that apply.

$3x^2 + 7x + 4 = 0$

Correct Answers:

Alg

	Choice
A.	$x = \dfrac{7 \pm \sqrt{97}}{6}$
B.	$x = 1$
*C.	$x = -1$
*D.	$x = -\dfrac{4}{5}$
E.	$x = -\dfrac{-7 - \sqrt{97}}{5}$
F.	$x = \dfrac{7 - \sqrt{97}}{6}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x = -1$ and $x = -\dfrac{4}{5}$.

Question 5a of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 91334)

Maximum Attempts:	1
Question Type:	Multiple Response
Maximum Score:	2
Question:	Which of the following are solutions to the equation below?

Check all that apply.

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

Correct Answers:

	Choice
A.	$x = \dfrac{3 - \sqrt{-7}}{2}$
B.	$x = -4$
C.	$x =$
*D.	$x = 4$
E.	$x =$
*F.	$x = -1$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x = 4$ and $x = -1$.

Alg

Question 5b of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 297706)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which of the following are solutions to the equation below?

Check all that apply.

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

Correct Answers:

	Choice
A.	$x = \dfrac{-3 + \sqrt{7}}{2}$
*B.	$x = -4$
C.	$x = \dfrac{-3 - \sqrt{7}}{2}$
D.	$x = 4$
*E.	$x = 1$
F.	$x = -1$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x = -4$ and $x = 1$.

Question 5c of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 297707)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which of the following are solutions to the equation below?

Check all that apply.

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

Correct Answers:

	Choice
A.	$x = 2 +$
*B.	$x = 3$
C.	$x = 2 -$
D.	$x = -3$
*E.	$x = 1$
F.	$x = -2 +$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

Alg

	Global Incorrect Feedback
	The correct answers are: $x = 3$ and $x = 1$.

Question 6a of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 91335)

Maximum Attempts:	1
Question Type:	Multiple Response
Maximum Score:	2
Question:	Which of the following are solutions to the equation below?
	Check all that apply.
	$x^2 - 5x + 1 = 0$

Correct Answers:

	Choice
A.	$x = \dfrac{5 + \sqrt{25}}{2}$
B.	$x = \dfrac{1 \cdot \sqrt{21}}{2}$
*C.	$x = \dfrac{5 + \sqrt{21}}{2}$
D.	$x = \dfrac{-1 - \sqrt{21}}{2}$
*E.	$x = \dfrac{5 - \sqrt{21}}{2}$
F.	$x = \dfrac{5 - \sqrt{25}}{2}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are:
	$x = \quad$ and $x = \quad$.

Question 6b of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 297708)

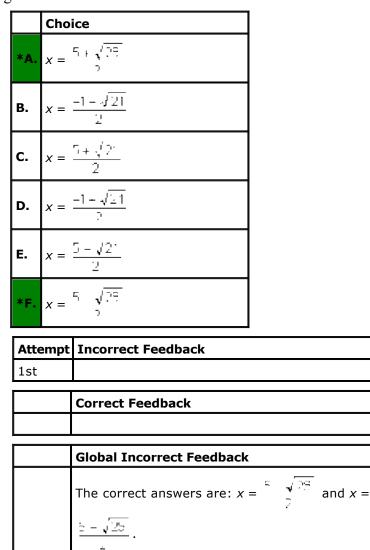|	
Maximum Attempts:	1
Question Type:	Multiple Response
Maximum Score:	2
Question:	Which of the following are solutions to the equation below?
	Check all that apply.
	$x^2 - 5x - 1 = 0$

Correct Answers:

Alg

	Choice
*A.	$x = \dfrac{5 + \sqrt{?9}}{?}$
B.	$x = \dfrac{-1 - \sqrt{21}}{2}$
C.	$x = \dfrac{5 + \sqrt{2}}{2}$
D.	$x = \dfrac{-1 - \sqrt{21}}{5}$
E.	$x = \dfrac{5 - \sqrt{2}}{2}$
*F.	$x = \dfrac{5 - \sqrt{?9}}{?}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x = \dfrac{5 + \sqrt{?9}}{?}$ and $x = \dfrac{5 - \sqrt{25}}{4}$.

Question 6c of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 297709)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which of the following are solutions to the equation below?

Check all that apply.

$x^2 + x - 5 = 0$

Correct Answers:

	Choice
A.	$x =$
*B.	$x =$
C.	$x =$
*D.	$x =$
E.	$x =$
F.	$x =$

Alg

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x = \dfrac{-3 - \sqrt{21}}{2}$ and $x = \dfrac{-3 + \sqrt{21}}{2}$.

Question 7a of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 91336)

Maximum Attempts:	1
Question Type:	Multiple Response
Maximum Score:	2
Question:	Which of the following are solutions to the equation below?

Check all that apply.

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

Correct Answers:

	Choice
*A.	$x = \dfrac{-3 + \sqrt{-23}}{8}$
B.	$x = \dfrac{3 + \sqrt{23}}{2}$
*C.	$x = \dfrac{3 - \sqrt{23}}{8}$
D.	$x = \dfrac{-3 - \sqrt{23}}{8}$
E.	$x = \dfrac{3 + \sqrt{23}}{8}$
F.	$x =$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are:
	$x =$ and $x =$.

Alg

Question 7b of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 297710)

Maximum Attempts:	1
Question Type:	Multiple Response
Maximum Score:	2
Question:	Which of the following are solutions to the equation below?
	Check all that apply.
	$5x^2 + 3x + 2 = 0$

Correct Answers:

	Choice
***A.**	$x = \dfrac{-3 + \sqrt{-3}}{1}$
B.	$x = \dfrac{-3 - \sqrt{31}}{10}$
***C.**	$x = \dfrac{-3 - \sqrt{-3}}{1}$
D.	$x = \dfrac{2}{5}$
E.	$x = -1$
F.	$x = \dfrac{-3 + \sqrt{31}}{10}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x = \dfrac{-3 - \sqrt{31}}{10}$ and $x = \dfrac{-3 + \sqrt{31}}{10}$.

Question 7c of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 297711)

Maximum Attempts:	1
Question Type:	Multiple Response
Maximum Score:	2
Question:	Which of the following are solutions to the equation below?
	Check all that apply.
	$4x^2 + 3x + 3 = 0$

Correct Answers:

Alg

	Choice
*A.	$x = \dfrac{3 \pm \sqrt{33}}{2}$
B.	$x = \dfrac{3 \pm \sqrt{33}}{3}$
*C.	$x = \dfrac{3 \pm \sqrt{33}}{2}$
D.	$x = \dfrac{3 \pm \sqrt{33}}{8}$
E.	$x = \dfrac{3 \pm \sqrt{57}}{8}$
F.	$x = \dfrac{3 \pm \sqrt{57}}{3}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x = \dfrac{-3 - \sqrt{-33}}{8}$ and $x = \dfrac{-3 + \sqrt{-33}}{8}$.

Question 8a of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 91337)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which of the following are solutions to the equation below?

Check all that apply.

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

Correct Answers:

	Choice
A.	$x =$
*B.	$x =$
C.	$x =$
D.	$x =$
E.	$x =$
*F.	$x =$

Alg

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x = \dfrac{+\sqrt{-?9}}{4}$ and $x = \dfrac{-\sqrt{-??}}{4}$.

Question 8b of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 297712)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which of the following are solutions to the equation below?

Check all that apply.

$3x^2 - x + 5 = 0$

Correct Answers:

	Choice
A.	$x = \dfrac{-\sqrt{?=}}{6}$
*B.	$x = \dfrac{-\sqrt{-?9}}{?}$
C.	$x = \dfrac{-\sqrt{?=}}{6}$
D.	$x = \dfrac{-\sqrt{61}}{6}$
E.	$x = \dfrac{\sqrt{61}}{6}$
*F.	$x = \dfrac{-\sqrt{-?9}}{?}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x =$ and $x =$.

Alg

Question 8c of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 297713)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 2
Question: Which of the following are solutions to the equation below?

Check all that apply.

$4x^2 - x + 5 = 0$

Correct Answers:

	Choice
A.	$x = \dfrac{1 - \sqrt{73}}{8}$
*B.	$x = \dfrac{1 - \sqrt{-79}}{2}$
C.	$x = \dfrac{1 - \sqrt{73}}{8}$
D.	$x = \dfrac{1 - \sqrt{81}}{6}$
E.	$x = \dfrac{1 - \sqrt{21}}{6}$
*F.	$x = \dfrac{1 - \sqrt{-79}}{2}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x = \dfrac{1 + \sqrt{73}}{8}$ and $x = \dfrac{1 - \sqrt{73}}{0}$.

Question 9a of 15 (1 Using The Quadratic Formula to Solve Quadratic Equations 121087)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: imaginary
Question: The square root of a negative value is called an _____ or complex number.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: imaginary.

Alg

Question 9b of 15 (1 Using The Quadratic Formula to Solve Quadratic Equations 297714)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	complex
Question:	The square root of a negative value is called an imaginary or _____ number.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: complex.

Question 9c of 15 (1 Using The Quadratic Formula to Solve Quadratic Equations 297715)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	negative, negativ
Question:	The square root of a _____ value is called an imaginary or complex number.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: negative.

Question 10a of 15 (1 Using The Quadratic Formula to Solve Quadratic Equations 121088)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	discriminant, discriminent
Question:	The _____ is the name of the number under the radical symbol in the quadratic formula.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: discriminant.

Alg

Question 10b of 15 (1 Using The Quadratic Formula to Solve Quadratic Equations 297716)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	discriminant, discriminent
Question:	The _____ is the name of the number under the radical symbol in the quadratic formula.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: discriminant.

Question 10c of 15 (1 Using The Quadratic Formula to Solve Quadratic Equations 297717)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	discriminant, discriminent
Question:	The _____ is the name of the number under the radical symbol in the quadratic formula.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: discriminant.

Question 11a of 15 (1 Using The Quadratic Formula to Solve Quadratic Equations 121089)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	subtract
Question:	If the right-hand side of a quadratic equation does not equal zero, you need to _____ the number or expression on the right-hand side from both sides before you can use the quadratic formula.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: subtract.

Alg

Question 11b of 15 (1 Using The Quadratic Formula to Solve Quadratic Equations 297718)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	subtract
Question:	If the right-hand side of a quadratic equation does not equal zero, you need to _____ the number or expression on the right-hand side from both sides before you can use the quadratic formula.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: subtract.

Question 11c of 15 (1 Using The Quadratic Formula to Solve Quadratic Equations 297719)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	subtract
Question:	If the right-hand side of a quadratic equation does not equal zero, you need to _____ the number or expression on the right-hand side from both sides before you can use the quadratic formula.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: subtract.

Question 12a of 15 (1 Using The Quadratic Formula to Solve Quadratic Equations 121090)

Maximum Attempts:	1
Question Type:	Numeric Fill In Blank
Maximum Score:	2
Correct Answer:	2
Question:	The quadratic formula cannot be used to solve an equation if a term in the equation has a degree higher than _____.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 2.

Alg

Question 12b of 15 (1 Using The Quadratic Formula to Solve Quadratic Equations 297720)

Maximum Attempts:	1
Question Type:	Numeric Fill In Blank
Maximum Score:	2
Correct Answer:	2
Question:	The quadratic formula cannot be used to solve an equation if a term in the equation has a degree higher than _____.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 2.

Question 12c of 15 (1 Using The Quadratic Formula to Solve Quadratic Equations 297721)

Maximum Attempts:	1
Question Type:	Numeric Fill In Blank
Maximum Score:	2
Correct Answer:	2
Question:	The quadratic formula cannot be used to solve an equation if a term in the equation has a degree higher than _____.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 2.

Question 13a of 15 (1 Using The Quadratic Formula to Solve Quadratic Equations 121091)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	real
Question:	You can determine by the discriminant whether the solutions to the equation are _____ or complex numbers.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: real.

Alg

Question 13b of 15 (1 Using The Quadratic Formula to Solve Quadratic Equations 297722)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	complex, imaginary, imaginiery
Question:	You can determine by the discriminant whether the solutions to the equation are real or _____ numbers.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: complex.

Question 13c of 15 (1 Using The Quadratic Formula to Solve Quadratic Equations 297723)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	real
Question:	You can determine by the discriminant whether the solutions to the equation are _____ or complex numbers.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: real.

Question 14a of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 121092)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	2
Question:	Check the solutions to the equation below.

$$x^2 + x + 2$$

Alg

	Choice	Feedback
A.	$x = \dfrac{-1 + \sqrt{-3}}{2}$ and $x = \dfrac{-1 - \sqrt{-3}}{2}$	
B.	$x = 2$ and $x = 1$	
*C.	$x = \dfrac{-1 + \sqrt{-7}}{2}$ and $x = \dfrac{-1 - \sqrt{-7}}{2}$	
D.	$x = 8$ and $x = 4$	

Global Incorrect Feedback
The correct answer is:
$x = \dfrac{-1 - \sqrt{-7}}{2}$ and $x = \dfrac{-1 - \sqrt{-7}}{2}$.

Question 14b of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 297724)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Check the solutions to the equation below.

$$x^2 + x + 1$$

	Choice	Feedback
*A.	$x = \dfrac{-1 + \sqrt{-3}}{2}$ and $x = \dfrac{-1 - \sqrt{-3}}{2}$	
B.	$x = 2$ and $x = 1$	
C.	$x = \dfrac{-1 + \sqrt{-7}}{2}$ and $x = \dfrac{-1 - \sqrt{-7}}{2}$	
D.	$x = 8$ and $x = 4$	

Global Incorrect Feedback
The correct answer is:
$x =$ and $x =$.

Question 14c of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 297725)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Check the solutions to the equation below.

$$x^2 + 3x + 4$$

Alg

	Choice	Feedback
A.	$x = \dfrac{1 + \sqrt{3}}{2}$ and $x = \dfrac{1 - \sqrt{3}}{2}$	
B.	$x = 2$ and $x = 1$	
***C.**	$x = \dfrac{-3 + \sqrt{-7}}{2}$ and $x = \dfrac{-3 - \sqrt{-7}}{2}$	
D.	$x = 3$ and $x = 2$	

Global Incorrect Feedback
The correct answer is:
$x = \dfrac{-3 + \sqrt{-7}}{2}$ and $x = \dfrac{-3 - \sqrt{-7}}{2}$.

Question 15a of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 133820)

Maximum Attempts:	1
Question Type:	Multiple Response
Maximum Score:	2
Question:	Which of the following are solutions to the equation below?

Check all that apply.

$x^2 + x + 5 = 0$

Correct Answers:

	Choice
***A.**	$x = \dfrac{-1 + \sqrt{-19}}{2}$
***B.**	$x = \dfrac{-1 - \sqrt{-19}}{2}$
C.	$x = 5$
D.	$x = 1$
E.	$x =$
F.	$x =$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x =$ and $x =$.

Alg

Question 15b of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 297726)

Maximum Attempts:	1
Question Type:	Multiple Response
Maximum Score:	2
Question:	Which of the following are solutions to the equation below?
	Check all that apply.
	$x^2 + x + 3 = 0$

Correct Answers:

	Choice
*A.	$x = \dfrac{\cdot\ \sqrt{\ 11}}{\ }$
*B.	$x = \dfrac{-\cdot - \sqrt{-11}}{\ }$
C.	$x = 3$
D.	$x = 1$
E.	$x = \dfrac{-\cdot - \sqrt{-1\overline{\ }}}{2}$
F.	$x = \dfrac{-\cdot - \sqrt{-1\overline{\ }}}{\ }$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x = \dfrac{1 + \sqrt{\ \ }}{2}$ and $x = \dfrac{1 - \sqrt{\ \ }}{2}$.

Question 15c of 15 (3 Using The Quadratic Formula to Solve Quadratic Equations 297727)

Maximum Attempts:	1
Question Type:	Multiple Response
Maximum Score:	2
Question:	Which of the following are solutions to the equation below?
	Check all that apply.
	$x^2 + x + 4 = 0$

Correct Answers:

Alg

	Choice
*A.	$x = \dfrac{\sqrt{15}}{2}$
*B.	$x = \sqrt{15}$
C.	$x = 4$
D.	$x = 1$
E.	$x = \dfrac{\sqrt{17}}{4}$
F.	$x = \dfrac{\sqrt{17}}{2}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x = \dfrac{-1 + \sqrt{-15}}{2}$ and $x = \dfrac{-1 - \sqrt{-15}}{2}$.