PREVIEW   CLOSE

Quiz: Factoring with the Zero Product Rule

Question 1a of 14 (3 Solving Quadratic Equations 90938)

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.

$x^2 - 11x + 24 = 0$

Correct Answers:

	Choice
A.	-24
B.	-3
C.	11
D.	-8
*E.	3
*F.	8

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: 3 and 8.

Question 1b of 14 (3 Solving Quadratic Equations 297517)

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.

$x^2 - 12x + 32 = 0$

Correct Answers:

	Choice
A.	-24
*B.	4
C.	12
*D.	8
E.	-4
F.	-8

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: 4 and 8.

Question 1c of 14 (3 Solving Quadratic Equations 297518)

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.

$x^2 - 11x + 28 = 0$

Correct Answers:

	Choice
*A.	4
B.	28
C.	-11
*D.	7
E.	-7
F.	-4

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: 4 and 7.

Question 2a of 14 (3 Solving Quadratic Equations 90939)

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.

$x^2 - 2x - 24 = 0$

Correct Answers:

	Choice
A.	-24
B.	10
C.	4
*D.	-4
*E.	6
F.	-6

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: -4 and 6.

Question 2b of 14 (3 Solving Quadratic Equations 297519)

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.

$x^2 + 1x - 20 = 0$

Correct Answers:

	Choice
A.	-20
B.	10
C.	-4
*D.	4
*E.	-5
F.	5

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: 4 and -5.

Question 2c of 14 (3 Solving Quadratic Equations 297520)

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.

$x^2 + 3x - 18 = 0$

Correct Answers:

	Choice
A.	9
*B.	3
C.	-3
D.	6
E.	18
*F.	-6

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: 3 and -6.

Question 3a of 14 (3 Solving Quadratic Equations 90940)

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.

$7x^2 + 35x - 252 = 0$

Correct Answers:

	Choice
A.	252
*B.	-9
C.	9
*D.	4
E.	-7
F.	-4

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: -9 and 4.

Question 3b of 14 (3 Solving Quadratic Equations 297521)

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.

$6x^2 + 30x - 216 = 0$

Correct Answers:

	Choice
A.	216
B.	9
*C.	-9
D.	-4
E.	-6
*F.	4

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: -9 and 4.

Question 3c of 14 (3 Solving Quadratic Equations 297522)

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.

$7x^2 + 35x - 168 = 0$

Correct Answers:

	Choice
A.	168
*B.	-8
C.	8
D.	-3
*E.	3
F.	-4

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: -8 and 3.

Question 4a of 14 (3 Solving Quadratic Equations 90941)

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.

$3x^2 + 27x + 60 = 0$

Correct Answers:

	Choice
A.	4
B.	5
*C.	-5
*D.	-4
E.	-60
F.	-27

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: -5 and -4.

Question 4b of 14 (3 Solving Quadratic Equations 297523)

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.

$4x^2 + 32x + 60 = 0$

Correct Answers:

	Choice
A.	5
*B.	-5
C.	3
*D.	-3
E.	-60
F.	-32

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: -5 and -3.

Question 4c of 14 (3 Solving Quadratic Equations 297524)

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.

$3x^2 + 27x + 54 = 0$

Correct Answers:

	Choice
A.	3
*B.	-3
C.	6
*D.	-6
E.	9
F.	-27

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: -3 and -6.

Question 5a of 14 (3 Solving Quadratic Equations 90942)

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 - 25 = 0

Correct Answers:

	Choice
A.	25
***B.**	5
***C.**	-5
D.	2
E.	-10
F.	10

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: 5 and -5.

Question 5b of 14 (3 Solving Quadratic Equations 297525)

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 - 81 = 0

Correct Answers:

	Choice
A.	81
***B.**	9
***C.**	-9
D.	2
E.	18
F.	-18

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: 9 and -9.

Question 5c of 14 (3 Solving Quadratic Equations 297526)

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.

$x^2 - 49 = 0$

Correct Answers:

	Choice
A.	49
B.	2
C.	-14
*D.	7
*E.	-7
F.	14

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: 7 and -7.

Question 6a of 14 (3 Solving Quadratic Equations 90943)

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.

$x^2 - 36 = 0$

Correct Answers:

	Choice
A.	12
B.	36
C.	2
*D.	-6
*E.	6
F.	-12

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: -6 and 6.

Question 6b of 14 (3 Solving Quadratic Equations 297527)

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.

$x^2 - 16 = 0$

Correct Answers:

	Choice
A.	16
B.	8
*C.	-4
D.	-2
*E.	4
F.	-8

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: -4 and 4.

Question 6c of 14 (3 Solving Quadratic Equations 297528)

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.

$x^2 - 64 = 0$

Correct Answers:

	Choice
A.	2
B.	64
*C.	8
*D.	-8
E.	16
F.	-16

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: 8 and -8.

Question 7a of 14 (3 Solving Quadratic Equations 90944)

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.

$15x^2 - 44x + 32 = 0$

Correct Answers:

	Choice
A.	$x = 8$
B.	$x = \dfrac{3}{4}$
*C.	$x = \dfrac{8}{5}$
D.	$x = \dfrac{5}{8}$
E.	$x = 4$
*F.	$x = \dfrac{4}{3}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x = \dfrac{8}{5}$ and $x = \dfrac{4}{3}$.

Question 7b of 14 (3 Solving Quadratic Equations 297529)

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.

$20x^2 - 47x + 24 = 0$

Correct Answers:

	Choice
A.	$x = 8$
*B.	$x = \dfrac{3}{4}$
C.	$x = \dfrac{5}{8}$
*D.	$x = \dfrac{8}{5}$
E.	$x = 4$
F.	$x = \dfrac{4}{3}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x = \dfrac{3}{4}$ and $x = \dfrac{8}{5}$.

Question 7c of 14 (3 Solving Quadratic Equations 297530)

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.

$24x^2 - 47x + 20 = 0$

Correct Answers:

	Choice
A.	$x = 8$
B.	$x = \dfrac{3}{4}$
C.	$x =$
*D.	$x =$
E.	$x = 4$
*F.	$x =$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

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

Question 8a of 14 (3 Solving Quadratic Equations 90945)

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.

$25x^2 - 50x + 21 = 0$

Correct Answers:

	Choice
*A.	$x = \dfrac{7}{5}$
*B.	$x = \dfrac{3}{5}$
C.	$x = \dfrac{7}{3}$
D.	$x = 3$
E.	$x = 5$
F.	$x = \dfrac{5}{3}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x = \dfrac{7}{5}$ and $x = \dfrac{3}{5}$.

Question 8b of 14 (3 Solving Quadratic Equations 297531)

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.

$15x^2 - 44x + 21 = 0$

Correct Answers:

	Choice
A.	$x =$
B.	$x = 3$
C.	$x =$
*D.	$x =$
E.	$x = 5$
*F.	$x =$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x = \dfrac{3}{5}$ and $x = \dfrac{7}{3}$.

Question 8c of 14 (3 Solving Quadratic Equations 297532)

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.

$15x^2 - 46x + 35 = 0$

Correct Answers:

	Choice
*A.	$x = \dfrac{7}{5}$
B.	$x = \dfrac{3}{5}$
C.	$x = \dfrac{7}{3}$
D.	$x = 3$
E.	$x = 5$
*F.	$x = \dfrac{5}{3}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x = \dfrac{7}{5}$ and $x = \dfrac{5}{3}$.

Question 9a of 14 (1 Solving Quadratic Equations 120923)

Maximum Attempts:	1
Question Type:	True-False
Maximum Score:	2
Question:	A quadratic equation is an equation that can be written in the form $ax^2 + bx + c = 0$, where a, b, and c are real numbers, and a is not 0.

	Choice	Feedback
*A.	True	
B.	False	

Global Incorrect Feedback
The correct answer is: True.

Question 9b of 14 (1 Solving Quadratic Equations 297533)

Maximum Attempts:	1
Question Type:	True-False
Maximum Score:	2
Question:	A quadratic equation is an equation that can be written in the form $ax^2 + bx + c = 0$, where a, b, and c are real numbers, and a is not 0.

	Choice	Feedback
*A.	True	
B.	False	

Global Incorrect Feedback
The correct answer is: True.

Question 9c of 14 (1 Solving Quadratic Equations 297534)

Maximum Attempts:	1
Question Type:	True-False
Maximum Score:	2
Question:	A quadratic equation is an equation that can be written in the form $ax^2 + bx + c = 0$, where a, b, and c are real numbers, and a is not 0.

	Choice	Feedback
*A.	True	
B.	False	

Global Incorrect Feedback
The correct answer is: True.

Question 10a of 14 (2 Solving Quadratic Equations 120924)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	x^2+3x-2=0, x^2+3x^1-2=0
Question:	Put the equation below in the form $ax^2 + bx + c = 0$. Enter exponents using the caret (^). For example, you would enter $4x^2$ as 4x^2.

$x^2 + 3x + 7 = 9$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $x^2 + 3x - 2 = 0$.

Question 10b of 14 (2 Solving Quadratic Equations 297535)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	x^2+2x+7=0, x^2+2x^1+7=0
Question:	Put the equation below in the form $ax^2 + bx + c = 0$. Enter exponents using the caret (^). For example, you would enter $4x^2$ as 4x^2.

$x^2 + 2x + 9 = 2$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $x^2 + 2x + 7 = 0$.

Question 10c of 14 (2 Solving Quadratic Equations 297536)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	x^2+4x+7=0, x^2+4x^1+7=0
Question:	Put the equation below in the form $ax^2 + bx + c = 0$. Enter exponents using the caret (^). For example, you would enter $4x^2$ as 4x^2.

$x^2 + 4x + 10 = 3$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $x^2 + 4x + 7 = 0$.

Question 11a of 14 (2 Solving Quadratic Equations 120926)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	3x^2-5x-2=0, 3x^2-5x^1-2=0
Question:	Put the equation below in the form $ax^2 + bx + c = 0$. Enter exponents using the caret (^). For example, you would enter $4x^2$ as 4x^2.

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

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $3x^2 - 5x - 2 = 0$.

Question 11b of 14 (2 Solving Quadratic Equations 297537)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	5x^2-3x-5=0, 5x^2-3x^1-5=0
Question:	Put the equation below in the form $ax^2 + bx + c = 0$. Enter exponents using the caret (^). For example, you would enter $4x^2$ as 4x^2.

$$x^2 - 5 = -4x^2 + 3x$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $5x^2 - 3x - 5 = 0$.

Question 11c of 14 (2 Solving Quadratic Equations 297538)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	4x^2-8x-3=0, 4x^2-8x^1-3=0
Question:	Put the equation below in the form $ax^2 + bx + c = 0$. Enter exponents using the caret (^). For example, you would enter $4x^2$ as 4x^2.

$$x^2 - 3 = -3x^2 + 8x$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $4x^2 - 8x - 3 = 0$.

Question 12a of 14 (2 Solving Quadratic Equations 120927)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	x^2+10x+9=0, x^2+10x^1+9=0
Question:	Put the equation below in the form $ax^2 + bx + c = 0$. Enter exponents using the caret (^). For example, you would enter $4x^2$ as 4x^2.

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

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $x^2 + 10x + 9 = 0$.

Question 12b of 14 (2 Solving Quadratic Equations 297539)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	x^2+7x+4=0, x^2+7x^1+4=0
Question:	Put the equation below in the form $ax^2 + bx + c = 0$. Enter exponents using the caret (^). For example, you would enter $4x^2$ as 4x^2.

$$(x + 2)^2 + 3x = 0$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $x^2 + 7x + 4 = 0$.

Question 12c of 14 (2 Solving Quadratic Equations 297540)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	x^2+12x+16=0, x^2+12x^1+16=0
Question:	Put the equation below in the form $ax^2 + bx + c = 0$. Enter exponents using the caret (^). For example, you would enter $4x^2$ as 4x^2.

$$(x + 4)^2 + 4x = 0$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $x^2 + 12x + 16 = 0$.

Question 13a of 14 (2 Solving Quadratic Equations 120928)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	5x^2-4x-2=0, -5x^2+4x+2=0, 5x^2-4x^1-2=0, -5x^2+4x^1+2=0
Question:	Put the equation below in the form $ax^2 + bx + c = 0$. Enter exponents using the caret (^). For example, you would enter $4x^2$ as 4x^2.

$$-x^2 + 3 = (2x - 1)^2$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $5x^2 - 4x - 2 = 0$.

Question 13b of 14 (2 Solving Quadratic Equations 297541)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	10x^2-6x-3=0, -10x^2+6x+3=0, 10x^2-6x^1-3=0, -10x^2+6x^1+3=0
Question:	Put the equation below in the form $ax^2 + bx + c = 0$. Enter exponents using the caret (^). For example, you would enter $4x^2$ as 4x^2.

$$-x^2 + 4 = (3x - 1)^2$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $10x^2 - 6x - 3 = 0$.

Question 13c of 14 (2 Solving Quadratic Equations 297542)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	17x^2-8x-2=0, -17x^2+8x+2=0, 17x^2-8x^1-2=0, -17x^2+8x^1+2=0
Question:	Put the equation below in the form $ax^2 + bx + c = 0$. Enter exponents using the caret (^). For example, you would enter $4x^2$ as 4x^2.

$$-x^2 + 3 = (4x - 1)^2$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $17x^2 - 8x - 2 = 0$.

Question 14a of 14 (1 Solving Quadratic Equations 120930)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	square
Question:	There are some instances where it is better to factor a polynomial without first putting it in standard form. One example is a quadratic equation that, in nonstandard form, contains a perfect _____ trinomial.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: square.

Question 14b of 14 (1 Solving Quadratic Equations 297543)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	square
Question:	There are some instances where it is better to factor a polynomial without first putting it in standard form. One example is a quadratic equation that, in nonstandard form, contains a perfect _____ trinomial.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: square.

Question 14c of 14 (1 Solving Quadratic Equations 297544)

Maximum Attempts:	1
Question Type:	Text Fill In Blank
Maximum Score:	2
Is Case Sensitive:	false
Correct Answer:	square
Question:	There are some instances where it is better to factor a polynomial without first putting it in standard form. One example is a quadratic equation that, in nonstandard form, contains a perfect _____ trinomial.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: square.