

Quiz: Factoring Polynomials

Question 1a of 15 (1 90992)**Maximum Attempts:** 1**Question Type:** Multiple Choice**Maximum Score:** 2**Question:** What is the factorization of the polynomial below?

$$x^2 + 10x + 21$$

	Choice	Feedback
A.	$(10x + 4)(x + 3)$	
B.	$(x + 3)(7x + 3)$	
*C.	$(x + 7)(x + 3)$	
D.	$(x + 10)(x + 2)$	

Global Incorrect FeedbackThe correct answer is: $(x + 7)(x + 3)$.**Question 1b of 15** (1 287288)**Maximum Attempts:** 1**Question Type:** Multiple Choice**Maximum Score:** 2**Question:** What is the factorization of the polynomial below?

$$x^2 + 7x + 10$$

	Choice	Feedback
A.	$(10x + 2)(x + 5)$	
*B.	$(x + 2)(x + 5)$	
C.	$(x + 7)(x + 3)$	
D.	$(x + 10)(x + 2)$	

Global Incorrect FeedbackThe correct answer is: $(x + 2)(x + 5)$.**Question 1c of 15** (1 287289)**Maximum Attempts:** 1**Question Type:** Multiple Choice**Maximum Score:** 2**Question:** What is the factorization of the polynomial below?

$$x^2 + 8x + 15$$

	Choice	Feedback
A.	$(15x + 5)(x + 3)$	
B.	$(x + 3)(x + 3)$	
C.	$(5x + 5)(x + 3)$	
*D.	$(x + 3)(x + 5)$	

Global Incorrect Feedback

The correct answer is: $(x + 3)(x + 5)$.

Question 2a of 15 (1 90993)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What is the factorization of the polynomial below?

$$x^2 + 11x + 18$$

	Choice	Feedback
A.	$(11x + 1)(x + 9)$	
B.	$(x + 9)(2x + 9)$	
*C.	$(x + 2)(x + 9)$	
D.	$(x + 11)(x + 5)$	

Global Incorrect Feedback

The correct answer is: $(x + 2)(x + 9)$.

Question 2b of 15 (1 287290)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What is the factorization of the polynomial below?

$$x^2 + 12x + 27$$

	Choice	Feedback
*A.	$(x + 3)(x + 9)$	
B.	$(x + 9)(2x + 9)$	
C.	$(3x + 3)(x + 9)$	
D.	$(12x + 1)(x + 2)$	

Global Incorrect Feedback

The correct answer is: $(x + 3)(x + 9)$.

Question 2c of 15 (1 287291)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What is the factorization of the polynomial below?

$$x^2 + 12x + 20$$

	Choice	Feedback
A.	$(12x + 1)(x + 10)$	
B.	$(x + 5)(2x + 5)$	
C.	$(x + 12)(x + 5)$	
*D.	$(x + 2)(x + 10)$	

Global Incorrect Feedback

The correct answer is: $(x + 2)(x + 10)$.

Question 3a of 15 (1 90994)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What are the factors of the polynomial below?

$$x^2 + 7x - 18$$

	Choice	Feedback
*A.	$(x + 9)(x - 2)$	
B.	$(7x + 9)(x - 2)$	
C.	$(x + 2)(9x - 2)$	
D.	$(7x + 11)(x - 1)$	

Global Incorrect Feedback

The correct answer is: $(x + 9)(x - 2)$.

Question 3b of 15 (1 287292)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What are the factors of the polynomial below?

$$x^2 + 8x - 20$$

	Choice	Feedback
A.	$(x + 8)(x - 2)$	
*B.	$(x + 10)(x - 2)$	
C.	$(x + 2)(8x - 2)$	
D.	$(8x + 12)(x - 1)$	

Global Incorrect Feedback

The correct answer is: $(x + 10)(x - 2)$.

Question 3c of 15 (1 287293)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What are the factors of the polynomial below?

$$x^2 + 6x - 27$$

	Choice	Feedback
A.	$(3x + 9)(x - 3)$	
B.	$(x + 9)(9x - 3)$	
C.	$(x + 3)(9x - 3)$	
*D.	$(x + 9)(x - 3)$	

Global Incorrect Feedback

The correct answer is: $(x + 9)(x - 3)$.

Question 4a of 15 (1 90995)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What are the factors of the polynomial below?

$$x^2 + 5x - 14$$

	Choice	Feedback
*A.	$(x + 7)(x - 2)$	
B.	$(5x + 7)(x - 2)$	
C.	$(5x + 9)(x - 1)$	
D.	$(x + 2)(7x - 2)$	

Global Incorrect Feedback

The correct answer is: $(x + 7)(x - 2)$.

Question 4b of 15 (1 287294)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What are the factors of the polynomial below?

$$x^2 + 4x - 21$$

	Choice	Feedback
A.	$(x + 7)(x - 2)$	
B.	$(5x + 7)(x - 3)$	
*C.	$(x + 7)(x - 3)$	
D.	$(x + 7)(7x - 2)$	

Global Incorrect Feedback

The correct answer is: $(x + 7)(x - 3)$.

Question 4c of 15 (1 287295)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What are the factors of the polynomial below?

$$x^2 + 5x - 24$$

	Choice	Feedback
A.	$(x + 8)(x - 2)$	
B.	$(3x + 8)(x - 3)$	
C.	$(x + 8)(x - 1)$	
*D.	$(x + 8)(x - 3)$	

Global Incorrect Feedback

The correct answer is: $(x + 8)(x - 3)$.

Question 5a of 15 (1 90996)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: If the factors of a polynomial are $x - 2$ and $x - 5$, what values of x make that polynomial 0?

	Choice	Feedback
A.	1 and 2	
B.	-2 and -5	
*C.	2 and 5	
D.	Cannot be determined	

Global Incorrect Feedback

The correct answer is: 2 and 5.

Question 5b of 15 (1 287296)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: If the factors of a polynomial are $x - 3$ and $x - 4$, what values of x make that polynomial 0?

	Choice	Feedback
A.	1 and 2	
B.	-3 and -4	
*C.	3 and 4	
D.	Cannot be determined	

Global Incorrect Feedback

The correct answer is: 3 and 4.

Question 5c of 15 (1 287297)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: If the factors of a polynomial are $x - 4$ and $x - 5$, what values of x make that polynomial 0?

	Choice	Feedback
A.	3 and 4	
B.	-4 and -5	
*C.	4 and 5	
D.	Cannot be determined	

Global Incorrect Feedback

The correct answer is: 4 and 5.

Question 6a of 15 (1 90997)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: If the factors of a polynomial are $x + 2$ and $x + 6$, what values of x make that polynomial 0?

	Choice	Feedback
*A.	-2 and -6	
B.	1 and 2	
C.	2 and 6	
D.	Cannot be determined	

Global Incorrect Feedback

The correct answer is: -2 and -6.

Question 6b of 15 (1 287298)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: If the factors of a polynomial are $x + 3$ and $x + 7$, what values of x make that polynomial 0?

	Choice	Feedback
*A.	-3 and -7	
B.	1 and 3	
C.	3 and 7	
D.	Cannot be determined	

Global Incorrect Feedback

The correct answer is: -3 and -7.

Question 6c of 15 (1 287299)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: If the factors of a polynomial are $x + 4$ and $x + 8$, what values of x make that polynomial 0?

	Choice	Feedback
A.	1 and 4	
B.	4 and 8	
*C.	-4 and -8	
D.	Cannot be determined	

Global Incorrect Feedback

The correct answer is: -4 and -8.

Question 7a of 15 (1 90998)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What are the solutions to the equation below?

$$(x - 6)(7x + 49) = 0$$

	Choice	Feedback
A.	$x = -6$ and $x = 7$	
B.	$x = -6$ and $x = 49$	
*C.	$x = 6$ and $x = -7$	
D.	$x = 6$ and $x = -49$	

Global Incorrect Feedback

The correct answer is: $x = 6$ and $x = -7$.

Question 7b of 15 (1 287300)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What are the solutions to the equation below?

$$(x - 5)(6x + 36) = 0$$

	Choice	Feedback
A.	$x = -5$ and $x = 6$	
*B.	$x = 5$ and $x = -6$	
C.	$x = 6$ and $x = -6$	
D.	$x = 6$ and $x = -36$	

Global Incorrect Feedback
The correct answer is: $x = 5$ and $x = -6$.

Question 7c of 15 (1 287301)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What are the solutions to the equation below?

$$(x - 4)(8x + 64) = 0$$

	Choice	Feedback
*A.	$x = 4$ and $x = -8$	
B.	$x = -4$ and $x = 48$	
C.	$x = 4$ and $x = 8$	
D.	$x = -4$ and $x = -8$	

Global Incorrect Feedback
The correct answer is: $x = 4$ and $x = -8$.

Question 8a of 15 (1 90999)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What are the solutions to the equation below?

$$(4x + 36)(8x - 40) = 0$$

	Choice	Feedback
A.	$x = 36$ and $x = -40$	
*B.	$x = -9$ and $x = 5$	
C.	$x = 9$ and $x = -5$	
D.	$x = -36$ and $x = 40$	

Global Incorrect Feedback
The correct answer is: $x = -9$ and $x = 5$.

Question 8b of 15 (1 287304)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 2
Question: What are the solutions to the equation below?

$$(5x + 40)(4x - 24) = 0$$

	Choice	Feedback
A.	$x = 40$ and $x = -24$	
B.	$x = 8$ and $x = -6$	
C.	$x = 24$ and $x = -40$	
*D.	$x = -8$ and $x = 6$	

Global Incorrect Feedback
The correct answer is: $x = -8$ and $x = 6$.

Question 8c of 15 (1 287305)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 2
Question: What are the solutions to the equation below?

$$(7x + 35)(2x - 12) = 0$$

	Choice	Feedback
*A.	$x = -5$ and $x = 6$	
B.	$x = -6$ and $x = 5$	
C.	$x = 35$ and $x = -5$	
D.	$x = -35$ and $x = 12$	

Global Incorrect Feedback
The correct answer is: $x = -5$ and $x = 6$.

Question 9a of 15 (1 120439)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: polynomials
Question: Integers have factors that are integers, while polynomials have factors that are _____.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: polynomials.

Question 9b of 15 (1 287306)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: polynomials

Question: Integers have factors that are integers, while polynomials have factors that are _____.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: polynomials.

Question 9c of 15 (1 287307)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: polynomials

Question: Integers have factors that are integers, while polynomials have factors that are _____.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: polynomials.

Question 10a of 15 (1 120441)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: composite, composit

Question: A number that can be factored is called _____.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: composite.

Question 10b of 15 (1 287308)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: factored, factor
Question: A number that can be _____ is called *composite*.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: factored.

Question 10c of 15 (1 287309)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: composite, composit
Question: A number that can be factored is called _____.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: composite.

Question 11a of 15 (1 120443)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: reducible, reducable, reduceble
Question: A polynomial that can be factored is called _____.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: reducible.

Question 11b of 15 (1 287310)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: reducible, reducable, reduceble
Question: A polynomial that can be factored is called _____.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: reducible.

Question 11c of 15 (1 287311)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: reducible, reducable, reduceble
Question: A polynomial that can be factored is called _____.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: reducible.

Question 12a of 15 (1 120444)

Maximum Attempts: 1
Question Type: True-False
Maximum Score: 2
Question: When you factor using the Zero Product Rule, the solutions to the simpler equations are also the solutions to the original equation.

	Choice	Feedback
*A.	True	
B.	False	

Global Incorrect Feedback
The correct answer is: True.

Question 12b of 15 (1 287312)

Maximum Attempts: 1
Question Type: True-False
Maximum Score: 2
Question: When you factor using the Zero Product Rule, the solutions to the simpler equations are also the solutions to the original equation.

	Choice	Feedback
*A.	True	
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 12c of 15 (1 287313)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: When you factor using the Zero Product Rule, the solutions to the simpler equations are also the solutions to the original equation.

	Choice	Feedback
*A.	True	
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 13a of 15 (1 120446)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: The factors for $x^2 + 5x + 6$ are $x + 2$ and $x + 3$.

	Choice	Feedback
*A.	True	
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 13b of 15 (1 287314)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: The factors for $x^2 + 3x + 4$ are $x + 2$ and $x + 3$.

	Choice	Feedback
A.	True	
*B.	False	

Global Incorrect Feedback

The correct answer is: False.

Question 13c of 15 (1 287315)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: The factors for $x^2 + 6x + 5$ are $x + 5$ and $x + 1$.

	Choice	Feedback
*A.	True	
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 14a of 15 (1 120447)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: The factors of x^2 are x and $x + 5$.

	Choice	Feedback
A.	True	
*B.	False	

Global Incorrect Feedback

The correct answer is: False.

Question 14b of 15 (1 287316)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: The factors of x^2 are x and $x + 1$.

	Choice	Feedback
A.	True	
*B.	False	

Global Incorrect Feedback

The correct answer is: False.

Question 14c of 15 (1 287317)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: The factors of x^2 are x and $x - 5$.

	Choice	Feedback
A.	True	
*B.	False	

Global Incorrect Feedback

The correct answer is: False.

Question 15a of 15 (1 120448)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: What values of x will make the polynomial 0 if its factors are $x - 3$ and $x - 4$?

Check all that apply.

Correct Answers:

	Choice
*A.	3
B.	-3
C.	-4
*D.	4

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: 3 and 4.

Question 15b of 15 (1 287318)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: What values of x will make the polynomial 0 if its factors are $x - 2$ and $x - 7$?

Check all that apply.

Correct Answers:

	Choice
A.	-2
*B.	2
*C.	7
D.	-7

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: 2 and 7.

Question 15c of 15 (1 287319)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: What values of x will make the polynomial 0 if its factors are $x - 6$ and $x - 3$?

Check all that apply.

Correct Answers:

	Choice
*A.	3
B.	-3
C.	-6
*D.	6

Attempt	Incorrect Feedback
1st	

	Correct Feedback

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