PREVIEW CLOSE

Exam: Algebra I-B Semester 2

Question 1a of 40 (2 Identifying Polynomials 478140)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 5
Question: Which of the following are polynomials? *Check all that apply.*

Correct Answers:

	Choice
A.	$x^3 + 2x + 27 + \sqrt{x}$
B.	$\frac{x + 7}{x + 2}$
***C.**	$x + 2$
***D.**	$x^2 + 3x + 1$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x + 2$ and $x^2 + 3x + 1$.

Question 1b of 40 (2 Identifying Polynomials 478174)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 5
Question: Which of the following are polynomials? *Check all that apply.*

Correct Answers:

	Choice
***A.**	$x^2 + 3x + 1$
B.	$x^2 +$
C.	
***D.**	$x^3 + x^2 + x$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x^2 + 3x + 1$ and $x^3 + x^2 + x$.

Question 1c of 40 (2 Identifying Polynomials 478175)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 5
Question: Which of the following are polynomials? *Check all that apply.*

Correct Answers:

	Choice
A.	$x + x^{-3}$
***B.**	$x^2 + x + 5$
C.	$\sqrt{x} + 2$
***D.**	$x^4 + x^2 + 7$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x^2 + x + 5$ and $x^4 + x^2 + 7$.

Question 2a of 40 (2 Identifying Polynomials 478141)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 5
Question: Which of the following are polynomials? *Check all that apply.*

Correct Answers:

	Choice
***A.**	$x^3 + 2x + 27$
***B.**	$1 + 1.5x^3 - 1.6x + x^7$
***C.**	$x^2 + x + 2$
D.	$x^2 + 3x + \frac{1}{x}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: • $x^3 + 2x + 27$ • $1 + 1.5x^3 - 1.6x + x^7$ • $x^2 + x + 2$

Question 2b of 40 (2 Identifying Polynomials 478176)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 5
Question: Which of the following are polynomials? *Check all that apply.*

Correct Answers:

	Choice
***A.**	$x^5 + 2x^3 + x + 27$
***B.**	$1 + 5x^5 - 16x + x^{30}$
C.	$x^2 + x + \frac{1}{x}$
***D.**	$x^2 + 3x$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: • $x^5 + 2x^3 + x + 27$ • $1 + 5x^5 - 16x + x^{30}$ • $x^2 + 3x$

Question 2c of 40 (2 Identifying Polynomials 478177)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 5
Question: Which of the following are polynomials? *Check all that apply.*

Correct Answers:

	Choice
***A.**	$x + 27$
B.	$1 + 1.5x^3 - 1.6x + x^7 +$
***C.**	$x^4 + x + 6$
***D.**	$x^2 + x + 2$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: • $x + 27$ • $x^4 + x + 6$ • $x^2 + x + 2$

Question 3a of 40 (3 Subtracting Polynomials 478142)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: -x^3+3.5x^2+3, -1x^3+3.5x^2+3, -x^3+7/2x^2+3, -1x^3+7/2x^2+3, -x^3+7x^2/2+3, -1x^3+7x^2/2+3
Question: Find the difference of the polynomials below. Use the caret (^) to enter any exponents; for example, write x^2 as x^2. Write your answer in descending order.

$(x^3 + 2x^2 + 4x + 7) - (2x^3 - 1.5x^2 + 4x + 4)$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $-x^3 + 3.5x^2 + 3$.

Question 3b of 40 (3 Subtracting Polynomials 478178)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: -2x^3+4.5x^2+2, -2x^3+4.5x^2+2, -2x^3+9/2x^2+2, -2x^3+9x^2/2+2, -2x^3+9x^2/2+2
Question: Find the difference of the polynomials below. Use the caret (^) to enter any exponents; for example, write x^2 as x^2. Write your answer in descending order.

$(x^3 + 2x^2 + 5x + 7) - (3x^3 - 2.5x^2 + 5x + 5)$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $-2x^3 + 4.5x^2 + 2$.

Question 3c of 40 (3 Subtracting Polynomials 478179)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: -4x^3+2.5x^2+2, -4x^3+5/2x^2+2, -4x^3+5x^2/2+2
Question: Find the difference of the polynomials below. Use the caret (^) to enter any exponents; for example, write x^2 as x^2. Write your answer in descending order.

$(x^3 + 2x^2 + 6x + 7) - (5x^3 - 0.5x^2 + 6x + 5)$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $-4x^3 + 2.5x^2 + 2$.

Question 4a of 40 (3 Subtracting Polynomials 478143)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 5

Is Case Sensitive: false

Correct Answer: x^4+1.5x+3, 1x^4+1.5x+3, x^4+3/2x+3, 1x^4+3/2x+3, x^4+3x/2+3, 1x^4+3x/2+3, x^4+3x/2+3, 1x^4+3x/2+3, x^4+1.5x+3, 1x^4+1.5x^1+3, x^4+3/2x^1+3, 1x^4+3/2x^1+3, 1x^4+3x^1/2+3

Question: Find the difference of the polynomials below. Use the caret (^) to enter any exponents; for example, write x^2 as x^2. Write your answer in descending order.

$(2x^4 + x^2 + 4.5x + 7) - (x^4 + x^2 + 3x + 4)$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $x^4 + 1.5x + 3$.

Question 4b of 40 (3 Subtracting Polynomials 478180)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 5

Is Case Sensitive: false

Correct Answer: 2x^4+1.5x+4, 2x^4+1.5x+4, 2x^4+3/2x+4, 2x^4+3/2x+4, 2x^4+3x/2+4, 2x^4+3x/2+4, 2x^4+3x/2+4, 2x^4+1.5x+4, 2x^4+1.5x^1+4, 2x^4+3/2x^1+4, 2x^4+3/2x^1+4, 2x^4+3x^1/2+4, 2x^4+3x^1/2+4

Question: Find the difference of the polynomials below. Use the caret (^) to enter any exponents; for example, write x^2 as x^2. Write your answer in descending order.

$(3x^4 + x^2 + 5.5x + 8) - (x^4 + x^2 + 4x + 4)$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $2x^4 + 1.5x + 4$.

Question 4c of 40 (3 Subtracting Polynomials 478181)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: x^4+3.5x+4, 1x^4+3.5x+4, x^4+7/2x+4, 1x^4+7/2x+4, x^4+7x/2+4, 1x^4+7x/2+4, x^4+7x/2+4, 1x^4+7x/2+4, x^4+3.5x+4, 1x^4+3.5x^1+4, x^4+7/2x^1+4, 1x^4+7/2x^1+4, x^4+7/2x^1+4, 1x^4+7/2x^1+4, x^4+7(x^1)/2+4, 1x^4+7(x^1)/2+4
Question: Find the difference of the polynomials below. Use the caret (^) to enter any exponents; for example, write x^2 as x^2. Write your answer in descending order.

$(2x^4 + x^2 + 4.5x + 8) - (x^4 + x^2 + x + 4)$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $x^4 + 3.5x + 3$.

Question 5a of 40 (2 Determining the Degree of a Polynomial 478144)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 4
Question: What is the degree of the polynomial below?

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

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 4.

Question 5b of 40 (2 Determining the Degree of a Polynomial 478182)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 5
Question: What is the degree of the polynomial below?

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

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 5.

Question 5c of 40 (2 Determining the Degree of a Polynomial 478183)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 6
Question: What is the degree of the polynomial below?

$5 + 6x^2 + 3x - 7x^3 + x^6$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 6.

Question 6a of 40 (2 Determining the Degree of a Polynomial 478145)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 3
Question: What is the degree of the polynomial below?

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

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 3.

Question 6b of 40 (2 Determining the Degree of a Polynomial 478184)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 4
Question: What is the degree of the polynomial below?

$3 + x^3 + 3x - 6x^4 + x^3$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 4.

Question 6c of 40 (2 Determining the Degree of a Polynomial 478185)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 5
Question: What is the degree of the polynomial below?

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

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 5.

Question 7a of 40 (3 Multiplying Binomials 478146)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 6x^2-7x-3, 6x^2-7x^1-3
Question: Calculate the product of the binomials below. Use the caret (^) to enter any exponents; for example, write x^2 as x^2. Write your answer in descending order.

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

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $6x^2 - 7x - 3$.

Question 7b of 40 (3 Multiplying Binomials 478186)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 9x^2-3x-2, 9x^2-3x^1-2
Question: Calculate the product of the binomials below. Use the caret (^) to enter any exponents; for example, write x^2 as x^2. Write your answer in descending order.

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

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $9x^2 - 3x - 2$.

Question 7c of 40 (3 Multiplying Binomials 478187)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 4x^2+x-3, 4x^2+x^1-3
Question: Calculate the product of the binomials below. Use the caret (^) to enter any exponents; for example, write x^2 as x^2. Write your answer in descending order.

$(4x - 3)(x + 1)$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

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

Question 8a of 40 (3 Multiplying Binomials 478147)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 4x^2-25
Question: Calculate the product of the binomials below. Use the caret (^) to enter any exponents; for example, write x^2 as x^2. Write your answer in descending order.

$(2x - 5)(2x + 5)$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $4x^2 - 25$.

Question 8b of 40 (3 Multiplying Binomials 478188)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: x^2-49
Question: Calculate the product of the binomials below. Use the caret (^) to enter any exponents; for example, write x^2 as x^2. Write your answer in descending order.

$(x - 7)(x + 7)$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $x^2 - 49$.

Question 8c of 40 (3 Multiplying Binomials 478189)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 9x^2-36
Question: Calculate the product of the binomials below. Use the caret (^) to enter any exponents; for example, write x^2 as x^2. Write your answer in descending order.

$(3x - 6)(3x + 6)$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $9x^2 - 36$.

Question 9a of 40 (3 Dividing Polynomials 483075)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: -2x^5 + 4x^4 + x - 2
Question: Divide the polynomial by the monomial. Enter your answer as a polynomial in descending order, using the caret (^) for exponents; for example, enter x^2 as x^2.

$(-6x^7 + 12x^6 + 3x^3 - 6x^2) \quad (3x^2)$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

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

Question 9b of 40 (3 Dividing Polynomials 483076)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: -x^7 - 3x^4 + 2x^3 - 1
Question: Divide the polynomial by the monomial. Enter your answer as a polynomial in descending order, using the caret (^) for exponents; for example, enter x^2 as x^2.

$(-11x^9 - 33x^6 + 22x^5 - 11x^2) \div (11x^2)$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $-x^7 - 3x^4 + 2x^3 - 1$.

Question 9c of 40 (3 Dividing Polynomials 483077)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: -2x^6 - x^3 - 3x^2 + 1
Question: Divide the polynomial by the monomial. Enter your answer as a polynomial in descending order, using the caret (^) for exponents; for example, enter x^2 as x^2.

$(-14x^8 - 7x^5 - 21x^4 + 7x^2) \div (7x^2)$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $-2x^6 - x^3 - 3x^2 + 1$.

Question 10a of 40 (3 Dividing Polynomials 483078)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 2x^5 - 3x^3 - x^2 + 4x
Question: Divide the polynomial by the monomial. Enter your answer as a polynomial in descending order, using the caret (^) for exponents; for example, enter x^2 as x^2.

$(4x^7 - 6x^5 - 2x^4 + 8x^3) \quad (2x^2)$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $2x^5 - 3x^3 - x^2 + 4x$.

Question 10b of 40 (3 Dividing Polynomials 483079)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 2x^5 + 3x^4 + x^3 + 4x
Question: Divide the polynomial by the monomial. Enter your answer as a polynomial in descending order, using the caret (^) for exponents; for example, enter x^2 as x^2.

$(6x^7 + 9x^6 - 3x^5 + 12x^3) \div (3x^2)$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $2x^5 + 3x^4 - x^3 + 4x$.

Question 10c of 40 (3 Dividing Polynomials 483080)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 2x^7 - 3x^4 + 4x^2 + x
Question: Divide the polynomial by the monomial. Enter your answer as a polynomial in descending order, using the caret (^) for exponents; for example, enter x^2 as x^2.

$(8x^9 - 12x^6 + 16x^4 + 4x^3) \quad (4x^2)$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $2x^7 - 3x^4 + 4x^2 + x$.

Question 11a of 40 (3 Solving Quadratic Equations 478150)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: -1/2
Question: Solve the equation below for *x*. If your answer is *not* a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.

$4x^2 + 4x + 1 = 0$

$x =$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: -1/2.

Question 11b of 40 (3 Solving Quadratic Equations 478194)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: -1/3
Question: Solve the equation below for *x*. If your answer is *not* a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.

$9x^2 + 6x + 1 = 0$

$x =$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: -1/3.

Question 11c of 40 (3 Solving Quadratic Equations 478195)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: -1/4
Question: Solve the equation below for *x*. If your answer is *not* a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.

$16x^2 + 8x + 1 = 0$

$x =$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: -1/4.

Question 12a of 40 (3 Solving Quadratic Equations 478151)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 5, five, 5., 5.0, 5.00
Question: Solve the equation below for *x*. If your answer is *not* a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.

$x^2 - 10x + 25 = 0$

$x =$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 5.

Question 12b of 40 (3 Solving Quadratic Equations 478196)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 4, four, 4., 4.0, 4.00
Question: Solve the equation below for *x*. If your answer is *not* a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.

$x^2 - 8x + 16 = 0$

$x =$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 4.

Question 12c of 40 (3 Solving Quadratic Equations 478197)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 6, six, 6., 6.0, 6.00
Question: Solve the equation below for *x*. If your answer is *not* a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.

$x^2 - 12x + 36 = 0$

$x =$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 6.

Question 13a of 40 (3 Using the Quadratic Formula to Solve Equations 478152)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 5
Question: Check each solution to the quadratic equation below:

$x^2 + 7x + 11 = 11x + 9$

Check all that apply.

Correct Answers:

	Choice
A.	4
***B.**	2 - $\sqrt{2}$
C.	-2 + $\sqrt{2}$
D.	2
E.	-2 -
***F.**	2 +

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: 2 - and 2 + .

Question 13b of 40 (3 Using the Quadratic Formula to Solve Equations 478198)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 5
Question: Check each solution to the quadratic equation below:

$x^2 + 7x + 11 = x + 4$

Check all that apply.

Correct Answers:

	Choice
A.	$3 + \sqrt{2}$
B.	$3 - \sqrt{2}$
***C.**	$-3 + \sqrt{2}$
D.	2
***E.**	$-3 - \sqrt{2}$
F.	3

Attempt	Incorrect Feedback
1st	

	Correct Feedback

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

Question 13c of 40 (3 Using the Quadratic Formula to Solve Equations 478199)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 5
Question: Check all that apply to each solution to the quadratic equation below:

$x^2 + 7x + 17 = 15x + 3$

Correct Answers:

	Choice
***A.**	4 -
B.	-4 -
***C.**	4 +
D.	2
E.	1
F.	-4 +

Attempt	Incorrect Feedback
1st	

	Correct Feedback

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

Question 14a of 40 (3 Using the Quadratic Formula to Solve Equations 478153)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 5
Question: Check each solution to the quadratic equation below:

$x^2 + 11x + 11 = 7x + 9$

Check all that apply.

Correct Answers:

	Choice
A.	4
B.	$2 - \sqrt{2}$
***C.**	$-2 + \sqrt{2}$
***D.**	$-2 - \sqrt{2}$
E.	6
F.	$2 + \sqrt{2}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

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

Question 14b of 40 (3 Using the Quadratic Formula to Solve Equations 478200)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 5
Question: Check each solution to the quadratic equation below:

$x^2 + x + 11 = 7x + 4$

Check all that apply.

Correct Answers:

	Choice
A.	4
***B.**	3 -
C.	6
D.	-3 -
E.	-3 +
***F.**	3 +

Attempt	Incorrect Feedback
1st	

	Correct Feedback

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

Question 14c of 40 (3 Using the Quadratic Formula to Solve Equations 478201)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 5
Question: Check each solution to the quadratic equation below:

$x^2 + 15x + 17 = 7x + 3$

Check all that apply.

Correct Answers:

	Choice
*A.	$-4 - \sqrt{2}$
B.	$4 - \sqrt{2}$
*C.	$-4 + \sqrt{2}$
D.	4
E.	6
F.	$4 + \sqrt{2}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $-4 + \sqrt{2}$ and $-4 - \sqrt{2}$.

Question 15a of 40 (3 Factoring Polynomials 478202)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: (x+7)(x-7), (x-7)(x+7), (1x+7)(1x-7), (1x-7)(1x+7), (x+7)*(x-7), (x-7)*(x+7), (1x+7)*(1x-7), (1x-7)*(1x+7), (x^1+7)(x^1-7), (x^1-7)(x^1+7), (1x^1+7)(1x^1-7), (1x^1-7)(1x^1+7), (x^1+7)*(x^1-7), (x^1-7)*(x^1+7), (1x^1+7)*(1x^1-7), (1x^1-7)*(1x^1+7)
Question: Factor the expression below. Write each factor as a polynomial in descending order.

$x^2 - 49$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $(x + 7)(x - 7)$.

Question 15b of 40 (3 Factoring Polynomials 478154)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: (x+5)(x-5), (x-5)(x+5), (1x+5)(1x-5), (1x-5)(1x+5), (x+5)*(x-5), (x-5)*(x+5), (1x+5)*(1x-5), (1x-5)*(1x+5), (x^1+5)(x^1-5), (x^1-5)(x^1+5), (1x^1+5)(1x^1-5), (1x^1-5)(1x^1+5), (x^1+5)*(x^1-5), (x^1-5)*(x^1+5), (1x^1+5)*(1x^1-5), (1x^1-5)*(1x^1+5)
Question: Factor the expression below. Write each factor as a polynomial in descending order.

x^2 - 25

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: (x + 5)(x - 5).

Question 15c of 40 (3 Factoring Polynomials 478203)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: (x+9)(x-9), (x-9)(x+9), (1x+9)(1x-9), (1x-9)(1x+9), (x+9)*(x-9), (x-9)*(x+9), (1x+9)*(1x-9), (1x-9)*(1x+9), (x^1+9)(x^1-9), (x^1-9)(x^1+9), (1x^1+9)(1x^1-9), (1x^1-9)(1x^1+9), (x^1+9)*(x^1-9), (x^1-9)*(x^1+9), (1x^1+9)*(1x^1-9), (1x^1-9)*(1x^1+9)
Question: Factor the expression below. Write each factor as a polynomial in descending order.

x^2 - 81

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: (x + 9)(x - 9).

Question 16a of 40 (3 Factoring Polynomials 478155)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: (2x+1)(2x-1), (2x-1)(2x+1), (2x+1)*(2x-1), (2x-1)*(2x+1), (2x^1+1)(2x^1-1), (2x^1-1)(2x^1+1), (2x^1+1)*(2x^1-1), (2x^1-1)*(2x^1+1)
Question: Factor the expression below. Write each factor as a polynomial in decreasing order.

$4x^2$ - 1

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: (2*x* + 1)(2*x* - 1).

Question 16b of 40 (3 Factoring Polynomials 478204)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: (3x+1)(3x-1), (3x-1)(3x+1), (3x+1)*(3x-1), (3x-1)*(3x+1), (3x^1+1)(3x^1-1), (3x^1-1)(3x^1+1), (3x^1+1)*(3x^1-1), (3x^1-1)*(3x^1+1)
Question: Factor the expression below. Write each factor as a polynomial in decreasing order.

$9x^2 - 1$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: (3*x* + 1)(3*x* - 1).

Question 16c of 40 (3 Factoring Polynomials 478205)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: (4x+1)(4x-1), (4x-1)(4x+1), (4x+1)*(4x-1), (4x-1)*(4x+1), (4x^1+1)(4x^1-1), (4x^1-1)(4x^1+1), (4x^1+1)*(4x^1-1), (4x^1-1)*(4x^1+1)
Question: Factor the expression below. Write each factor as a polynomial in decreasing order.

$16x^2 - 1$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: (4*x* + 1)(4*x* - 1).

Question 17a of 40 (3 Factoring Polynomials 478156)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: (x+1)(x+3), (x+3)(x+1), (1x+1)(1x+3), (1x+3)(1x+1), (x+1)*(x+3), (x+3)*(x+1), (1x+1)*(1x+3), (1x+3)*(1x+1), (x^1+1)(x^1+3), (x^1+3)(x^1+1), (1x^1+1)(1x^1+3), (1x^1+3)(1x^1+1), (x^1+1)*(x^1+3), (x^1+3)*(x^1+1), (1x^1+1)*(1x^1+3), (1x^1+3)*(1x^1+1)
Question: Factor the expression below. Write each factor as a polynomial in decreasing order.

$x^2 + 4x + 3$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $(x + 1)(x + 3)$.

Question 17b of 40 (3 Factoring Polynomials 478206)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: (x+1)(x+4), (x+4)(x+1), (1x+1)(1x+4), (1x+4)(1x+1), (x+1)*(x+4), (x+4)*(x+1), (1x+1)*(1x+4), (1x+4)*(1x+1), (x^1+1)(x^1+4), (x^1+4)(x^1+1), (1x^1+1)(1x^1+4), (1x^1+4)(1x^1+1), (x^1+1)*(x^1+4), (x^1+4)*(x^1+1), (1x^1+1)*(1x^1+4), (1x^1+4)*(1x^1+1)
Question: Factor the expression below. Write each factor as a polynomial in decreasing order.

$x^2 + 5x + 4$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $(x + 1)(x + 4)$.

Question 17c of 40 (3 Factoring Polynomials 478207)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: (x+1)(x+5), (x+5)(x+1), (1x+1)(1x+5), (1x+5)(1x+1), (x+1)*(x+5), (x+5)*(x+1), (1x+1)*(1x+5), (1x+5)*(1x+1), (x^1+1)(x^1+5), (x^1+5)(x^1+1), (1x^1+1)(1x^1+5), (1x^1+5)(1x^1+1), (x^1+1)*(x^1+5), (x^1+5)*(x^1+1), (1x^1+1)*(1x^1+5), (1x^1+5)*(1x^1+1)
Question: Factor the expression below. Write each factor as a polynomial in decreasing order.

$x^2 + 6x + 5$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: (x + 1)(x + 5).

Question 18a of 40 (3 Factoring Polynomials 478157)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 5

Is Case Sensitive: false

Correct Answer: (x+2)(x-7), (x-7)(x+2), (1x+2)(1x-7), (1x-7)(1x+2), (x+2)*(x-7), (x-7)*(x+2), (1x+2)*(1x-7), (1x-7)*(1x+2), (x^1+2)(x^1-7), (x^1-7)(x^1+2), (1x^1+2)(1x^1-7), (1x^1-7)(1x^1+2), (x^1+2)*(x^1-7), (x^1-7)*(x^1+2), (1x^1+2)*(1x^1-7), (1x^1-7)*(1x^1+2)

Question: Factor the expression below. Write each factor as a polynomial in decreasing order.

x^2 - 5x - 14

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: (x + 2)(x - 7).

Question 18b of 40 (3 Factoring Polynomials 478208)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 5

Is Case Sensitive: false

Correct Answer: (x+2)(x-6), (x-6)(x+2), (1x+2)(1x-6), (1x-6)(1x+2), (x+2)*(x-6), (x-6)*(x+2), (1x+2)*(1x-6), (1x-6)*(1x+2), (x^1+2)(x^1-6), (x^1-6)(x^1+2), (1x^1+2)(1x^1-6), (1x^1-6)(1x^1+2), (x^1+2)*(x^1-6), (x^1-6)*(x^1+2), (1x^1+2)*(1x^1-6), (1x^1-6)*(1x^1+2)

Question: Factor the expression below. Write each factor as a polynomial in decreasing order.

x^2 - 4x - 12

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: (x + 2)(x - 6).

Question 18c of 40 (3 Factoring Polynomials 478209)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: (x+3)(x-5), (x-5)(x+3), (1x+3)(1x-5), (1x-5)(1x+3), (x+3)*(x-5), (x-5)*(x+3), (1x+3)*(1x-5), (1x-5)*(1x+3), (x^1+3)(x^1-5), (x^1-5)(x^1+3), (1x^1+3)(1x^1-5), (1x^1-5)(1x^1+3), (x^1+3)*(x^1-5), (x^1-5)*(x^1+3), (1x^1+3)*(1x^1-5), (1x^1-5)*(1x^1+3)
Question: Factor the expression below. Write each factor as a polynomial in decreasing order.

$x^2 - 2x - 15$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $(x + 3)(x - 5)$.

Question 19a of 40 (3 Factoring Polynomials 478158)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: (2x+3)(5x-4), (5x-4)(2x+3), (2x+3)*(5x-4), (5x-4)*(2x+3), (2x^1+3)(5x^1-4), (5x^1-4)(2x^1+3), (2x^1+3)*(5x^1-4), (5x^1-4)*(2x^1+3)
Question: Factor the expression below. Write each factor as a polynomial in decreasing order.

$10x^2 + 7x - 12$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $(2x + 3)(5x - 4)$.

Question 19b of 40 (3 Factoring Polynomials 478210)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: (2x+3)(5x-3), (5x-3)(2x+3), (2x+3)*(5x-3), (5x-3)*(2x+3), (2x^1+3)(5x^1-3), (5x^1-3)(2x^1+3), (2x^1+3)*(5x^1-3), (5x^1-3)*(2x^1+3)
Question: Factor the expression below. Write each factor as a polynomial in decreasing order.

$10x^2 + 9x - 9$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: (2*x* + 3)(5*x* - 3).

Question 19c of 40 (3 Factoring Polynomials 478211)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: (2x+5)(3x-5), (3x-5)(2x+5), (2x+5)*(3x-5), (3x-5)*(2x+5), (2x^1+5)(3x^1-5), (3x^1-5)(2x^1+5), (2x^1+5)*(3x^1-5), (3x^1-5)*(2x^1+5)
Question: Factor the expression below. Write each factor as a polynomial in decreasing order.

$6x^2 + 5x - 25$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: (2*x* + 5)(3*x* - 5).

Question 20a of 40 (3 Factoring Polynomials 478159)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: (2x+1)(x-3), (x-3)(2x+1), (2x+1)*(x-3), (x-3)*(2x+1), (2x+1)(1x-3), (1x-3)(2x+1), (2x+1)*(1x-3), (1x-3)*(2x+1), (2x^1+1)(x^1-3), (x^1-3)(2x^1+1), (2x^1+1)*(x^1-3), (x^1-3)*(2x^1+1), (2x^1+1)(1x^1-3), (1x^1-3)(2x^1+1), (2x^1+1)*(1x^1-3), (1x^1-3)*(2x^1+1)
Question: Factor the expression below. Write each factor as a polynomial in decreasing order.

$2x^2 - 5x - 3$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: (2*x* + 1)(*x* - 3).

Question 20b of 40 (3 Factoring Polynomials 478212)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: (3x+1)(x-2), (x-2)(3x+1), (3x+1)*(x-2), (x-2)*(3x+1), (3x+1)(1x-2), (1x-2)(3x+1), (3x+1)*(1x-2), (1x-2)*(3x+1), (3x^1+1)(x^1-2), (x^1-2)(3x^1+1), (3x^1+1)*(x^1-2), (x^1-2)*(3x^1+1), (3x^1+1)(1x^1-2), (1x^1-2)(3x^1+1), (3x^1+1)*(1x^1-2), (1x^1-2)*(3x^1+1)
Question: Factor the expression below. Write each factor as a polynomial in decreasing order.

$3x^2 - 5x - 2$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $(3x + 1)(x - 2)$.

Question 20c of 40 (3 Factoring Polynomials 478213)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: (3x+1)(x-4), (x-4)(3x+1), (3x+1)*(x-4), (x-4)*(3x+1), (3x+1)(1x-4), (1x-4)(3x+1), (3x+1)*(1x-4), (1x-4)*(3x+1), (3x^1+1)(x^1-4), (x^1-4)(3x^1+1), (3x^1+1)*(x^1-4), (x^1-4)*(3x^1+1), (3x^1+1)(1x^1-4), (1x^1-4)(3x^1+1), (3x^1+1)*(1x^1-4), (1x^1-4)*(3x^1+1)
Question: Factor the expression below. Write each factor as a polynomial in decreasing order.

$3x^2 - 11x - 4$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: $(3x + 1)(x - 4)$.

Question 21a of 40 (3 Multiplying Radicals 478160)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 18, 18/1
Question: Solve the equation for x. If necessary, enter a non-integer answer as a fraction in lowest terms, using the slash mark (/) as the fraction bar. Do not include "x =" in your answer.

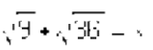
Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 18.

Question 21b of 40 (3 Multiplying Radicals 478214)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 18, 18/1
Question: Solve the equation for *x*. If necessary, enter a non-integer answer as a fraction in lowest terms, using the slash mark (/) as the fraction bar. Do not include "*x* =" in your answer.



Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 18.

Question 21c of 40 (3 Multiplying Radicals 478215)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 12, 12/1
Question: Solve the equation for *x*. If necessary, enter a non-integer answer as a fraction in lowest terms, using the slash mark (/) as the fraction bar. Do not include "*x* =" in your answer.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 12.

Question 22a of 40 (3 Dividing Radicals 478161)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 3/4
Question: Solve the equation for *x*. If necessary, enter a non-integer answer as a fraction in lowest terms, using the slash mark (/) as the fraction bar. Do not include "*x* =" in your answer.

$\sqrt{27} \div \sqrt{48} = x$

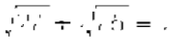
Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 3/4.

Question 22b of 40 (3 Dividing Radicals 478216)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 3/5
Question: Solve the equation for *x*. If necessary, enter a non-integer answer as a fraction in lowest terms, using the slash mark (/) as the fraction bar. Do not include "*x* =" in your answer.



Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 3/5.

Question 22c of 40 (3 Dividing Radicals 478217)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 2/3
Question: Solve the equation for *x*. If necessary, enter a non-integer answer as a fraction in lowest terms, using the slash mark (/) as the fraction bar. Do not include "*x* =" in your answer.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 2/3.

Question 23a of 40 (3 Multiplying Radicals 478162)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 8, 8/1
Question: Solve the equation for *x*. If necessary, enter a non-integer answer as a fraction in lowest terms, using the slash mark (/) as the fraction bar. Do not include "*x* =" in your answer.

$\sqrt{32} \bullet \sqrt{2} = x$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 8.

Question 23b of 40 (3 Multiplying Radicals 478218)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 9, 9/1
Question: Solve the equation for *x*. If necessary, enter a non-integer answer as a fraction in lowest terms, using the slash mark (/) as the fraction bar. Do not include "*x* =" in your answer.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 9.

Question 23c of 40 (3 Multiplying Radicals 478219)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 25, 25/1
Question: Solve the equation for *x*. If necessary, enter a non-integer answer as a fraction in lowest terms, using the slash mark (/) as the fraction bar. Do not include "*x* =" in your answer.

$\sqrt{125} \cdot \sqrt{5} = x$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 25.

Question 24a of 40 (3 Multiplying Radicals 478163)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 10, 10/1
Question: Solve the equation for *x*. If necessary, enter a non-integer answer as a fraction in lowest terms, using the slash mark (/) as the fraction bar. Do not include "*x* =" in your answer.

$\sqrt{20} \cdot \sqrt{5} = x$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 10.

Question 24b of 40 (3 Multiplying Radicals 478220)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 15, 15/1
Question: Solve the equation for *x*. If necessary, enter a non-integer answer as a fraction in lowest terms, using the slash mark (/) as the fraction bar. Do not include "*x* =" in your answer.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 15.

Question 24c of 40 (3 Multiplying Radicals 478221)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 6, 6/1
Question: Solve the equation for *x*. If necessary, enter a non-integer answer as a fraction in lowest terms, using the slash mark (/) as the fraction bar. Do not include "*x* =" in your answer.

$\sqrt{12} \cdot \sqrt{3} = x$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 6.

Question 25a of 40 (3 Multiplying Complex Numbers 478164)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 14 - 8i, -8i + 14
Question: Find the product of the complex numbers and enter it below. Remember that $i = \sqrt{-1}$.

$(2 - 3i)(4 + 2i)$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 14 - 8*i*.

Question 25b of 40 (3 Multiplying Complex Numbers 478222)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 14 + 2i, 2i + 14
Question: Find the product of the complex numbers and enter it below. Remember that $i = \sqrt{-1}$.

(4 - 3*i*)(2 + 2*i*)

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 14 + 2*i*.

Question 25c of 40 (3 Multiplying Complex Numbers 478223)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 19 - 4i, -4i + 19
Question: Find the product of the complex numbers and enter it below. Remember that $i = \sqrt{-1}$.

(3 - 2*i*)(5 + 2*i*)

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 19 - 4*i*.

Question 26a of 40 (3 Multiplying Complex Numbers 478165)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 8 + 11i, 11i + 8
Question: Find the product of the complex numbers and enter it below. Remember that *i* = .

(2 - *i*)(1 + 6*i*)

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 8 + 11*i*.

Question 26b of 40 (3 Multiplying Complex Numbers 478224)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 8 + 14i, 14i + 8
Question: Find the product of the complex numbers and enter it below. Remember that $i = \sqrt{-1}$.

(3 - *i*)(1 + 5*i*)

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 8 + 14*i*.

Question 26c of 40 (3 Multiplying Complex Numbers 478225)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 8 + 15i, 15i + 8
Question: Find the product of the complex numbers and enter it below. Remember that $i = \sqrt{-1}$.

(4 - *i*)(1 + 4*i*)

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 8 + 15*i*.

Question 27a of 40 (3 Multiplying Radicals 478166)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 5/7, 5 / 7
Question: Simplify the expression below. If your answer is not a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.

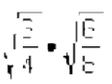
Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 5/7.

Question 27b of 40 (3 Multiplying Radicals 478226)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 3/4, 3 / 4
Question: Simplify the expression below. If your answer is not a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.



Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 3/4.

Question 27c of 40 (3 Multiplying Radicals 478227)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 3/5
Question: Simplify the expression below. If your answer is not a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 3/5.

Question 28a of 40 (3 Multiplying Radicals 478167)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 11/4
Question: Simplify the expression below. If your answer is not a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.

$$\sqrt{\frac{11}{8}} \cdot \sqrt{\frac{11}{2}}$$

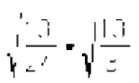
Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 11/4.

Question 28b of 40 (3 Multiplying Radicals 478228)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 13/9
Question: Simplify the expression below. If your answer is not a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.



Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 13/9.

Question 28c of 40 (3 Multiplying Radicals 478229)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 15/4
Question: Simplify the expression below. If your answer is not a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 15/4.

Question 29a of 40 (3 Multiplying Radicals 478168)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 2/3
Question: Simplify the expression below. If your answer is not a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.

$$\sqrt{\frac{5}{9}} \cdot \sqrt{\frac{4}{5}}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 2/3.

Question 29b of 40 (3 Multiplying Radicals 478230)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 3/2, 1.5
Question: Simplify the expression below. If your answer is not a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.

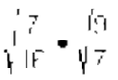
Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 3/2.

Question 29c of 40 (3 Multiplying Radicals 478231)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 3/4
Question: Simplify the expression below. If your answer is not a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.



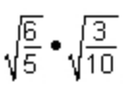
Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 3/4.

Question 30a of 40 (3 Multiplying Radicals 478169)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 3/5
Question: Simplify the expression below. If your answer is not a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.



Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 3/5.

Question 30b of 40 (3 Multiplying Radicals 478232)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 3/7
Question: Simplify the expression below. If your answer is not a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.

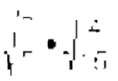
Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 3/7.

Question 30c of 40 (3 Multiplying Radicals 478233)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 2/5
Question: Simplify the expression below. If your answer is not a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.



Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 2/5.

Question 31a of 40 (3 Multiplying Radicals 478170)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 5/2
Question: Simplify the expression below. If your answer is not a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.

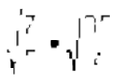
Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 5/2.

Question 31b of 40 (3 Multiplying Radicals 478234)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 7/2
Question: Simplify the expression below. If your answer is not a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.



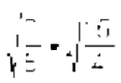
Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 7/2.

Question 31c of 40 (3 Multiplying Radicals 478235)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 5
Is Case Sensitive: false
Correct Answer: 3/2
Question: Simplify the expression below. If your answer is not a whole number, enter it as a fraction in lowest terms, using the slash mark (/) as the fraction bar.



Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 3/2.

Question 32a of 40 (3 Rationalizing the Denominator 478171)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 5
Question: Which choice is equivalent to the fraction below? Hint: Rationalize the denominator and simplify.

	Choice	Feedback
A.	$2+\sqrt{3}$	
B.	$3+2\sqrt{2}$	
C.	$1+\sqrt{2}$	
*D.	$2-\sqrt{3}$	

Global Incorrect Feedback
The correct answer is: $2-\sqrt{3}$.

Question 32b of 40 (3 Rationalizing the Denominator 478236)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 5
Question: Which choice is equivalent to the fraction below? Hint: Rationalize the denominator and simplify.

$$\frac{2-2\sqrt{2}}{2+2\sqrt{2}}$$

	Choice	Feedback
A.	$2-\sqrt{2}$	
*B.	$-3+2\sqrt{2}$	
C.	$1-\sqrt{2}$	
D.	$-2-\sqrt{2}$	

Global Incorrect Feedback
The correct answer is: $-3+2\sqrt{2}$.

Question 32c of 40 (3 Rationalizing the Denominator 478237)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 5
Question: Which choice is equivalent to the fraction below? Hint: Rationalize the denominator and simplify.

	Choice	Feedback
*A.		
B.		
C.		
D.		

Global Incorrect Feedback
The correct answer is: .

Question 33a of 40 (3 Reducing a Rational Expression 478172)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 5
Question: Which choice is equivalent to the rational expression below when $x \neq 3$ or -1?

$$\frac{x^2-9}{(x-3)(x+1)}$$

	Choice	Feedback
A.	$\frac{x+3}{x-3}$	
*B.	$\frac{x+3}{x+1}$	
C.	$\frac{x^2}{x-3}$	
D.	$\frac{x-3}{x+1}$	

Global Incorrect Feedback
The correct answer is: $\frac{x+3}{x+1}$.

Question 33b of 40 (3 Reducing a Rational Expression 478238)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 5
Question: Which choice is equivalent to the rational expression below when $x \neq 2$ or -1?

$$\frac{x^2-4}{(x-2)(x+1)}$$

	Choice	Feedback
*A.	$\frac{x+2}{x-1}$	
B.		
C.		
D.		

Global Incorrect Feedback
The correct answer is: .

Question 33c of 40 (3 Reducing a Rational Expression 478239)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 5
Question: Which choice is equivalent to the rational expression below when $x \neq -2$ or -1?

$$\frac{x^2-4}{(x-2)(x+1)}$$

	Choice	Feedback
A.	$\frac{x^2}{x-2}$	
B.	$\frac{x+3}{x+1}$	
C.	$\frac{x-2}{x+1}$	
*D.	$\frac{x-2}{x+1}$	

Global Incorrect Feedback
The correct answer is: $\frac{x-2}{x+1}$.

Question 34a of 40 (3 Rationalizing the Denominator 478173)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 5
Question: Which choice is equivalent to the fraction below? Hint: Rationalize the denominator and simplify.

$$\frac{1+\sqrt{2}}{1-\sqrt{2}}$$

	Choice	Feedback
A.	$2-\sqrt{3}$	
B.		
C.		
*D.		

Global Incorrect Feedback
The correct answer is: .

Question 34b of 40 (3 Rationalizing the Denominator 478240)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 5
Question: Which choice is equivalent to the fraction below? Hint: Rationalize the denominator and simplify.

	Choice	Feedback
A.	$2-\sqrt{3}$	
*B.	$-3-2\sqrt{2}$	
C.	$1+\sqrt{2}$	
D.	$-3-2\sqrt{2}$	

Global Incorrect Feedback
The correct answer is: $-3-2\sqrt{2}$.

Question 34c of 40 (3 Rationalizing the Denominator 478241)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 5
Question: Which choice is equivalent to the fraction below? Hint: Rationalize the denominator and simplify.

$$\frac{2-\sqrt{2}}{2-\sqrt{2}}$$

	Choice	Feedback
A.	$2-\sqrt{3}$	
*B.	$3+2\sqrt{2}$	
C.	$1+\sqrt{2}$	
D.	$-3-2\sqrt{2}$	

Global Incorrect Feedback
The correct answer is: $3+2\sqrt{2}$.

Question 35a of 40 (2 Monomials with like terms 478242)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 5
Question: Which of the following are like terms? Check all that apply.

Correct Answers:

	Choice
A.	
B.	
*C.	
*D.	
E.	

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: 1 and 2 and 3.

Question 35b of 40 (2 Monomials with like terms 478243)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 5
Question: Which of the following are like terms? Check all that apply.

Correct Answers:

	Choice
A.	$-3gh^2$ and $7g^2h$
***B.**	7 and 7
***C.**	$8xy^2$ and $-3xy^2$
***D.**	xyz and $-5xyz$
E.	$9ab^2c$ and $2a^2b^2$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: 7 and 7, $8xy^2$ and $-3xy^2$, and xyz and $-5xyz$.

Question 35c of 40 (2 Monomials with like terms 478244)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 5
Question: Which of the following are like terms? Check all that apply.

Correct Answers:

	Choice
***A.**	
B.	
C.	
***D.**	
E.	

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: -2 and 1 and $-3x^6y^3$ and $4x^5y^3$.

Question 36a of 40 (3 Adding Monomials 478245)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 5
Question: What is the sum of the following monomials?

$8x^2y + 7x^2y$

	Choice	Feedback
*A.	$15x^2y$	
B.	$56x^2y$	
C.	$15x^4y^2$	
D.	$15x^4y^2$	

Global Incorrect Feedback
The correct answer is: $15x^2y$.

Question 36b of 40 (3 Adding Monomials 478246)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 5
Question: What is the sum of the following monomials?

$2ab + 4ab$

	Choice	Feedback
*A.	$6ab$	
B.	$8ab$	
C.		
D.		

Global Incorrect Feedback
The correct answer is .

Question 36c of 40 (3 Adding Monomials 478247)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 5
Question: What is the sum of the following monomials?

	Choice	Feedback
*A.	$7a^2b^3$	
B.	$12a^2b^3$	
C.	$12a^4b^6$	
D.	$7a^6b^3$	

Global Incorrect Feedback
The correct answer is: $7a^2b^3$.

Question 37a of 40 (3 Multiplying Monomials 478248)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 5
Question: What is the product of the following monomials?

$8a^2 \cdot -6a^2b$

	Choice	Feedback
*A.	$-48a^3b^3$	
B.	$2a^3b^3$	
C.	$\frac{2b}{a}$	
D.	$\frac{4a^2}{a}$	

Global Incorrect Feedback
The correct answer is: $-48a^3b^3$.

Question 37b of 40 (3 Multiplying Monomials 478249)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 5
Question: What is the product of the following monomials?

	Choice	Feedback
*A.		
B.		
C.		
D.		

Global Incorrect Feedback
The correct answer is: .

Question 37c of 40 (3 Multiplying Monomials 478250)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 5
Question: What is the product of the following monomials?

$5u^2v^3 \cdot 6uv^2$

	Choice	Feedback
*A.	$30u^3v^5$	
B.	$11u^3v^5$	
C.	$11uv$	
D.	$30uv$	

Global Incorrect Feedback
The correct answer is: $30u^3v^5$.

Question 38a of 40 (3 Advanced Proportions 478251)

Maximum Attempts: 1
Question Type: Numeric Fill In Blank
Maximum Score: 5
Correct Answer: 10
Question: Solve the equation for *x.*

$$\frac{6x+6}{7} \quad \frac{2x-4}{2}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 10.

Question 38b of 40 (3 Advanced Proportions 478252)

Maximum Attempts: 1
Question Type: Numeric Fill In Blank
Maximum Score: 5
Correct Answer: 7
Question: Solve the equation for *x.*

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 7.

Question 38c of 40 (3 Advanced Proportions 478253)

Maximum Attempts: 1
Question Type: Numeric Fill In Blank
Maximum Score: 5
Correct Answer: 29
Question: Solve the equation for *x.*

$$\frac{3x-2}{7}=\frac{4x+5}{5}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 29.

Question 39a of 40 (3 Advanced Proportions 478254)

Maximum Attempts: 1
Question Type: Numeric Fill In Blank
Maximum Score: 5
Correct Answer: -11
Question: Solve the equation for *m*.

$$\frac{6m-1}{11m+4}=\frac{5}{9}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: -11.

Question 39b of 40 (3 Advanced Proportions 478255)

Maximum Attempts: 1
Question Type: Numeric Fill In Blank
Maximum Score: 5
Correct Answer: 90
Question: Solve the equation for *m*.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 90.

Question 39c of 40 (3 Advanced Proportions 478256)

Maximum Attempts: 1
Question Type: Numeric Fill In Blank
Maximum Score: 5
Correct Answer: 26
Question: Solve the equation for *m*.

$$\frac{m-8}{2m+5}=\frac{1}{3}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 26.

Question 40a of 40 (3 Advanced Proportions 478257)

Maximum Attempts: 1
Question Type: Numeric Fill In Blank
Maximum Score: 5
Correct Answer: 7
Question: Solve the equation for *y.*

$$\frac{y-8}{5}=\frac{y-2}{2}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 7.

Question 40b of 40 (3 Advanced Proportions 478258)

Maximum Attempts: 1
Question Type: Numeric Fill In Blank
Maximum Score: 5
Correct Answer: 4
Question: Solve the equation for *y.*

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 4.

Question 40c of 40 (3 Advanced Proportions 478259)

Maximum Attempts: 1
Question Type: Numeric Fill In Blank
Maximum Score: 5
Correct Answer: 29
Question: Solve the equation for *y.*

$$\frac{y-3}{5}=\frac{x-1}{6}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 29.