

Quiz: Sum or Difference of Two Cubes

Question 1a of 15 (2 Factoring A Sum Or Difference of Two Cubes 90930)**Maximum Attempts:** 1**Question Type:** True-False**Maximum Score:** 2**Question:** The expression below is a sum of cubes.

$$125x^3 + 169$$

	Choice	Feedback
A.	True	
*B.	False	

Global Incorrect Feedback

The correct answer is: False.

Question 1b of 15 (2 Factoring A Sum Or Difference of Two Cubes 297387)**Maximum Attempts:** 1**Question Type:** True-False**Maximum Score:** 2**Question:** The expression below is a sum of cubes.

$$125x^3 + 144$$

	Choice	Feedback
A.	True	
*B.	False	

Global Incorrect Feedback

The correct answer is: False.

Question 1c of 15 (2 Factoring A Sum Or Difference of Two Cubes 297419)**Maximum Attempts:** 1**Question Type:** True-False**Maximum Score:** 2**Question:** The expression below is a sum of cubes.

$$216x^3 + 169$$

	Choice	Feedback
A.	True	
*B.	False	

Global Incorrect Feedback

The correct answer is: False.

Question 2a of 15 (2 Factoring A Sum Or Difference of Two Cubes 90931)**Maximum Attempts:** 1**Question Type:** True-False**Maximum Score:** 2**Question:** The expression below is a sum of cubes.

$$125x^3 + 216$$

Alg

	Choice	Feedback
*A.	True	
B.	False	

Global Incorrect Feedback
The correct answer is: True.

Question 2b of 15 (2 Factoring A Sum Or Difference of Two Cubes 297420)

Maximum Attempts: 1
Question Type: True-False
Maximum Score: 2
Question: The expression below is a sum of cubes.

$$64x^3 + 125$$

	Choice	Feedback
*A.	True	
B.	False	

Global Incorrect Feedback
The correct answer is: True.

Question 2c of 15 (2 Factoring A Sum Or Difference of Two Cubes 297421)

Maximum Attempts: 1
Question Type: True-False
Maximum Score: 2
Question: The expression below is a sum of cubes.

$$216x^3 + 64$$

	Choice	Feedback
*A.	True	
B.	False	

Global Incorrect Feedback
The correct answer is: True.

Question 3a of 15 (3 Factoring A Sum Or Difference of Two Cubes 90932)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false

Correct Answer: $(x+5)(x^2-5x+25)$, $(x^2-5x+25)(x+5)$, $(x+5)*(x^2-5x+25)$, $(x^2-5x+25)*(x+5)$, $(x^1+5)(x^2-5x^1+25)$, $(x^2-5x^1+25)(x^1+5)$, $(x^1+5)*(x^2-5x^1+25)$, $(x^2-5x^1+25)*(x^1+5)$, $(1x+5)(1x^2-5x+25)$, $(1x^2-5x+25)(1x+5)$, $(1x+5)*(1x^2-5x+25)$, $(1x^2-5x+25)*(1x+5)$, $(1x^1+5)(1x^2-5x^1+25)$, $(1x^2-5x^1+25)(1x^1+5)$, $(1x^1+5)*(1x^2-5x^1+25)$, $(1x^2-5x^1+25)*(1x^1+5)$

Question: Factor the expression given below. Write each factor as a polynomial in descending order. Enter exponents using the caret (^). For example, you would enter x^2 as x^2 .

$$x^3 + 125$$

Attempt	Incorrect Feedback
1st	

Alg

	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: $(x + 5)(x^2 - 5x + 25)$.

Question 3b of 15 (3 Factoring A Sum Or Difference of Two Cubes 297435)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false

Correct Answer: $(x+6)(x^2-6x+36)$, $(x^2-6x+36)(x+6)$, $(x+6)*(x^2-6x+36)$, $(x^2-6x+36)*(x+6)$, $(x^1+6)(x^2-6x^1+36)$, $(x^2-6x^1+36)(x^1+6)$, $(x^1+6)*(x^2-6x^1+36)$, $(x^2-6x^1+36)*(x^1+6)$, $(1x+6)(1x^2-6x+36)$, $(1x^2-6x+36)(1x+6)$, $(1x+6)*(1x^2-6x+36)$, $(1x^2-6x+36)*(1x+6)$, $(1x^1+6)(1x^2-6x^1+36)$, $(1x^2-6x^1+36)(1x^1+6)$, $(1x^1+6)*(1x^2-6x^1+36)$, $(1x^2-6x^1+36)*(1x^1+6)$

Question: Factor the expression given below. Write each factor as a polynomial in descending order. Enter exponents using the caret (^). For example, you would enter x^2 as x^2 .

$$x^3 + 216$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: $(x + 6)(x^2 - 6x + 36)$.

Question 3c of 15 (3 Factoring A Sum Or Difference of Two Cubes 297436)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false

Correct Answer: $(x+4)(x^2-4x+16)$, $(x^2-4x+16)(x+4)$, $(x+4)*(x^2-4x+16)$, $(x^2-4x+16)*(x+4)$, $(x^1+4)(x^2-4x^1+16)$, $(x^2-4x^1+16)(x^1+4)$, $(x^1+4)*(x^2-4x^1+16)$, $(x^2-4x^1+16)*(x^1+4)$, $(1x+4)(1x^2-4x+16)$, $(1x^2-4x+16)(1x+4)$, $(1x+4)*(1x^2-4x+16)$, $(1x^2-4x+16)*(1x+4)$, $(1x^1+4)(1x^2-4x^1+16)$, $(1x^2-4x^1+16)(1x^1+4)$, $(1x^1+4)*(1x^2-4x^1+16)$, $(1x^2-4x^1+16)*(1x^1+4)$

Question: Factor the expression given below. Write each factor as a polynomial in descending order. Enter exponents using the caret (^). For example, you would enter x^2 as x^2 .

$$x^3 + 64$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: $(x + 4)(x^2 - 4x + 16)$.

Alg

Question 4a of 15 (3 Factoring A Sum Or Difference of Two Cubes 90933)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(x+3)(x^2-3x+9)$, $(x^2-3x+9)(x+3)$, $(x+3)^*(x^2-3x+9)$, $(x^2-3x+9)^*(x+3)$, $(x^1+3)(x^2-3x^1+9)$, $(x^2-3x^1+9)(x^1+3)$, $(x^1+3)^*(x^2-3x^1+9)$, $(x^2-3x^1+9)^*(x^1+3)$, $(1x+3)(1x^2-3x+9)$, $(1x^2-3x+9)(1x+3)$, $(1x+3)^*(1x^2-3x+9)$, $(1x^2-3x+9)^*(1x+3)$, $(1x^1+3)(1x^2-3x^1+9)$, $(1x^2-3x^1+9)(1x^1+3)$, $(1x^1+3)^*(1x^2-3x^1+9)$, $(1x^2-3x^1+9)^*(1x^1+3)$

Question: Factor the expression given below. *Write each factor as a polynomial in descending order.* Enter exponents using the caret (^). For example, you would enter x^2 as x^2 .

$$x^3 + 27$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

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

Question 4b of 15 (3 Factoring A Sum Or Difference of Two Cubes 297437)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(x+2)(x^2-2x+4)$, $(x^2-2x+4)(x+2)$, $(x+2)^*(x^2-2x+4)$, $(x^2-2x+4)^*(x+2)$, $(x^1+2)(x^2-2x^1+4)$, $(x^2-2x^1+4)(x^1+2)$, $(x^1+2)^*(x^2-2x^1+4)$, $(x^2-2x^1+4)^*(x^1+2)$, $(1x+2)(1x^2-2x+4)$, $(1x^2-2x+4)(1x+2)$, $(1x+2)^*(1x^2-2x+4)$, $(1x^2-2x+4)^*(1x+2)$, $(1x^1+2)(1x^2-2x^1+4)$, $(1x^2-2x^1+4)(1x^1+2)$, $(1x^1+2)^*(1x^2-2x^1+4)$, $(1x^2-2x^1+4)^*(1x^1+2)$

Question: Factor the expression given below. *Write each factor as a polynomial in descending order.* Enter exponents using the caret (^). For example, you would enter x^2 as x^2 .

$$x^3 + 8$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

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

Alg

Question 4c of 15 (3 Factoring A Sum Or Difference of Two Cubes 297449)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(x+7)(x^2-7x+49)$, $(x^2-7x+49)(x+7)$, $(x+7)^*(x^2-7x+49)$, $(x^2-7x+49)^*(x+7)$, $(x^1+7)(x^2-7x^1+49)$, $(x^2-7x^1+49)(x^1+7)$, $(x^1+7)^*(x^2-7x^1+49)$, $(x^2-7x^1+49)^*(x^1+7)$, $(1x+7)(1x^2-7x+49)$, $(1x^2-7x+49)(1x+7)$, $(1x+7)^*(1x^2-7x+49)$, $(1x^2-7x+49)^*(1x+7)$, $(1x^1+7)(1x^2-7x^1+49)$, $(1x^2-7x^1+49)(1x^1+7)$, $(1x^1+7)^*(1x^2-7x^1+49)$, $(1x^2-7x^1+49)^*(1x^1+7)$

Question: Factor the expression given below. Write each factor as a polynomial in descending order. Enter exponents using the caret (^). For example, you would enter x^2 as x^2 .

$$x^3 + 343$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: $(x + 7)(x^2 - 7x + 49)$.

Question 5a of 15 (3 Factoring A Sum Or Difference of Two Cubes 90934)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(y-4)(y^2+4y+16)$, $(y^2+4y+16)(y-4)$, $(y-4)^*(y^2+4y+16)$, $(y^2+4y+16)^*(y-4)$, $(y^1-4)(y^2+4y^1+16)$, $(y^2+4y^1+16)(y^1-4)$, $(y^1-4)^*(y^2+4y^1+16)$, $(y^2+4y^1+16)^*(y^1-4)$, $(1y-4)(1y^2+4y+16)$, $(1y^2+4y+16)(1y-4)$, $(1y-4)^*(1y^2+4y+16)$, $(1y^2+4y+16)^*(1y-4)$, $(1y^1-4)(1y^2+4y^1+16)$, $(1y^2+4y^1+16)(1y^1-4)$, $(1y^1-4)^*(1y^2+4y^1+16)$, $(1y^2+4y^1+16)^*(1y^1-4)$

Question: Factor the expression given below. Write each factor as a polynomial in descending order. Enter exponents using the caret (^). For example, you would enter x^2 as x^2 .

$$y^3 - 64$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: $(y - 4)(y^2 + 4y + 16)$.

Alg

Question 5b of 15 (3 Factoring A Sum Or Difference of Two Cubes 297451)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(y-5)(y^2+5y+25), (y^2+5y+25)(y-5), (y-5)*(y^2+5y+25), (y^2+5y+25)*(y-5), (y^1-5)(y^2+5y^1+25), (y^2+5y^1+25)(y^1-5), (y^1-5)*(y^2+5y^1+25), (y^2+5y^1+25)*(y^1-5), (1y-5)(1y^2+5y+25), (1y^2+5y+25)(1y-5), (1y-5)*(1y^2+5y+25), (1y^2+5y+25)*(1y-5), (1y^1-5)(1y^2+5y^1+25), (1y^2+5y^1+25)(1y^1-5), (1y^1-5)*(1y^2+5y^1+25), (1y^2+5y^1+25)*(1y^1-5)$

Question: Factor the expression given below. Write each factor as a polynomial in descending order. Enter exponents using the caret (^). For example, you would enter x^2 as x^2 .

$$y^3 - 125$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: $(y - 5)(y^2 + 5y + 25)$.

Question 5c of 15 (3 Factoring A Sum Or Difference of Two Cubes 297452)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(y-6)(y^2+6y+36), (y^2+6y+36)(y-6), (y-6)*(y^2+6y+36), (y^2+6y+36)*(y-6), (y^1-6)(y^2+6y^1+36), (y^2+6y^1+36)(y^1-6), (y^1-6)*(y^2+6y^1+36), (y^2+6y^1+36)*(y^1-6), (1y-6)(1y^2+6y+36), (1y^2+6y+36)(1y-6), (1y-6)*(1y^2+6y+36), (1y^2+6y+36)*(1y-6), (1y^1-6)(1y^2+6y^1+36), (1y^2+6y^1+36)(1y^1-6), (1y^1-6)*(1y^2+6y^1+36), (1y^2+6y^1+36)*(1y^1-6)$

Question: Factor the expression given below. Write each factor as a polynomial in descending order. Enter exponents using the caret (^). For example, you would enter x^2 as x^2 .

$$y^3 - 216$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: $(y - 6)(y^2 + 6y + 36)$.

Alg

Question 6a of 15 (3 Factoring A Sum Or Difference of Two Cubes 297455)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(y-7)(y^2+7y+49), (y^2+7y+49)(y-7), (y-7)*(y^2+7y+49), (y^2+7y+49)*(y-7), (y^1-7)(y^2+7y^1+49), (y^2+7y^1+49)(y^1-7), (y^1-7)*(y^2+7y^1+49), (y^2+7y^1+49)*(y^1-7), (1y-7)(1y^2+7y+49), (1y^2+7y+49)(1y-7), (1y-7)*(1y^2+7y+49), (1y^2+7y+49)*(1y-7), (1y^1-7)(1y^2+7y^1+49), (1y^2+7y^1+49)(1y^1-7), (1y^1-7)*(1y^2+7y^1+49), (1y^2+7y^1+49)*(1y^1-7), (y^2+7y+49)(y-7)$

Question: Factor the expression given below. Write each factor as a polynomial in descending order. Enter exponents using the caret (^). For example, you would enter x^2 as x^2 .

$$y^3 - 343$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: $(y - 7)(y^2 + 7y + 49)$.

Question 6b of 15 (3 Factoring A Sum Or Difference of Two Cubes 90935)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(y-3)(y^2+3y+9), (y^2+3y+9)(y-3), (y-3)*(y^2+3y+9), (y^2+3y+9)*(y-3), (y^1-3)(y^2+3y^1+9), (y^2+3y^1+9)(y^1-3), (y^1-3)*(y^2+3y^1+9), (y^2+3y^1+9)*(y^1-3), (1y-3)(1y^2+3y+9), (1y^2+3y+9)(1y-3), (1y-3)*(1y^2+3y+9), (1y^2+3y+9)*(1y-3), (1y^1-3)(1y^2+3y^1+9), (1y^2+3y^1+9)(1y^1-3), (1y^1-3)*(1y^2+3y^1+9), (1y^2+3y^1+9)*(1y^1-3), (y^2+3y+9)(y-3)$

Question: Factor the expression given below. Write each factor as a polynomial in descending order. Enter exponents using the caret (^). For example, you would enter x^2 as x^2 .

$$y^3 - 27$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: $(y - 3)(y^2 + 3y + 9)$.

Alg

Question 6c of 15 (3 Factoring A Sum Or Difference of Two Cubes 297454)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(y-2)(y^2+2y+4), (y^2+2y+4)(y-2), (y-2)*(y^2+2y+4), (y^2+2y+4)*(y-2), (y^{1-2})(y^2+2y^{1+4}), (y^2+2y^{1+4})(y^{1-2}), (y^{1-2})*(y^2+2y^{1+4}), (y^2+2y^{1+4})*(y^{1-2}), (1y-2)(1y^2+2y+4), (1y^2+2y+4)(1y-2), (1y-2)*(1y^2+2y+4), (1y^2+2y+4)*(1y-2), (1y^{1-2})(1y^2+2y^{1+4}), (1y^2+2y^{1+4})(1y^{1-2}), (1y^{1-2})*(1y^2+2y^{1+4}), (1y^2+2y^{1+4})*(1y^{1-2}), (y^2+2y+4)(y-2)$

Question: Factor the expression given below. Write each factor as a polynomial in descending order. Enter exponents using the caret (^). For example, you would enter x^2 as x^2 .

$$y^3 - 8$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: $(y - 2)(y^2 + 2y + 4)$

Question 7a of 15 (3 Factoring A Sum Or Difference of Two Cubes 90936)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(4x+7y)(16x^2-28xy+49y^2), (16x^2-28xy+49y^2)(4x+7y), (4x+7y)*(16x^2-28xy+49y^2), (16x^2-28xy+49y^2)*(4x+7y), (4x^{1+7y^1})(16x^2-28x^{1y^1}+49y^2), (16x^2-28x^{1y^1}+49y^2)(4x^{1+7y^1}), (4x^{1+7y^1})*(16x^2-28x^{1y^1}+49y^2), (16x^2-28x^{1y^1}+49y^2)*(4x^{1+7y^1}), (7y+4x)(16x^2-28xy+49y^2), (16x^2-28xy+49y^2)(7y+4x), (7y+4x)*(16x^2-28xy+49y^2), (16x^2-28xy+49y^2)*(7y+4x), (4x^{1+7y^1})(16x^2-28x^{1y^1}+49y^2), (16x^2-28x^{1y^1}+49y^2)(4x^{1+7y^1}), (4x^{1+7y^1})*(16x^2-28x^{1y^1}+49y^2), (16x^2-28x^{1y^1}+49y^2)*(4x^{1+7y^1}), (4x+7y)(49y^2-28xy+16x^2), (49y^2-28xy+16x^2)(4x+7y), (4x+7y)*(49y^2-28xy+16x^2), (49y^2-28xy+16x^2)*(4x+7y), (4x^{1+7y^1})(49y^2-28x^{1y^1}+16x^2), (49y^2-28x^{1y^1}+16x^2)(4x^{1+7y^1}), (4x^{1+7y^1})*(49y^2-28x^{1y^1}+16x^2), (49y^2-28x^{1y^1}+16x^2)*(4x^{1+7y^1}), (7y+4x)(49y^2-28xy+16x^2), (49y^2-28xy+16x^2)(7y+4x), (7y+4x)*(49y^2-28xy+16x^2), (49y^2-28x^{1y^1}+16x^2)*(7y+4x), (7y^{1+4x^1})(49y^2-28x^{1y^1}+16x^2), (49y^2-28x^{1y^1}+16x^2)(7y^{1+4x^1}), (7y^{1+4x^1})*(49y^2-28x^{1y^1}+16x^2), (49y^2-28x^{1y^1}+16x^2)*(7y^{1+4x^1}), (4x+7y)(16x^2-28yx+49y^2), (16x^2-28yx+49y^2)(4x+7y), (4x+7y)*(16x^2-28yx+49y^2), (16x^2-28yx+49y^2)*(4x+7y), (4x^{1+7y^1})(16x^2-28y^{1x^1}+49y^2), (16x^2-28y^{1x^1}+49y^2)(4x^{1+7y^1}), (4x^{1+7y^1})*(16x^2-28y^{1x^1}+49y^2), (16x^2-28y^{1x^1}+49y^2)*(4x^{1+7y^1}), (7y+4x)(16x^2-28yx+49y^2), (16x^2-28yx+49y^2)(7y+4x), (7y+4x)*(16x^2-28yx+49y^2), (16x^2-28y^{1x^1}+49y^2)*(7y+4x), (4x^{1+7y^1})(16x^2-28y^{1x^1}+49y^2), (16x^2-28y^{1x^1}+49y^2)(4x^{1+7y^1}), (4x^{1+7y^1})*(16x^2-28y^{1x^1}+49y^2), (16x^2-28y^{1x^1}+49y^2)*(4x^{1+7y^1}), (4x+7y)(49y^2-28yx+16x^2), (49y^2-28yx+16x^2)(4x+7y), (4x+7y)*(49y^2-28yx+16x^2), (49y^2-28yx+16x^2)*(4x+7y), (4x^{1+7y^1})(49y^2-28y^{1x^1}+16x^2), (49y^2-28y^{1x^1}+16x^2)(4x^{1+7y^1}), (4x^{1+7y^1})*(49y^2-28y^{1x^1}+16x^2), (49y^2-28y^{1x^1}+16x^2)*(4x^{1+7y^1}), (7y+4x)(49y^2-28yx+16x^2), (49y^2-28yx+16x^2)(7y+4x), (7y+4x)*(49y^2-28yx+16x^2), (49y^2-28y^{1x^1}+16x^2)*(7y+4x), (7y^{1+4x^1})(49y^2-28y^{1x^1}+16x^2), (49y^2-28y^{1x^1}+16x^2)(7y^{1+4x^1}), (7y^{1+4x^1})*(49y^2-28y^{1x^1}+16x^2), (49y^2-28y^{1x^1}+16x^2)*(7y^{1+4x^1})$

Question: Factor the expression given below. Write each factor as a polynomial in descending order. Enter exponents using the caret (^). For example, you would enter x^2 as x^2 .

$$64x^3 + 343y^3$$

Alg

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: $(4x + 7y)(16x^2 - 28xy + 49y^2)$.

Question 7b of 15 (3 Factoring A Sum Or Difference of Two Cubes 297456)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(5x+8y)(25x^2-40xy+64y^2)$, $(25x^2-40xy+64y^2)(5x+8y)$, $(5x+8y)*(25x^2-40xy+64y^2)$, $(25x^2-40xy+64y^2)*(5x+8y)$, $(4x^1+8y^1)(25x^2-40x^1y^1+64y^2)$, $(25x^2-40x^1y^1+64y^2)(4x^1+8y^1)$, $(4x^1+8y^1)*(25x^2-40x^1y^1+64y^2)$, $(25x^2-40x^1y^1+64y^2)*(4x^1+8y^1)$, $(8y+4x)(25x^2-40xy+64y^2)$, $(25x^2-40xy+64y^2)(8y+4x)$, $(8y+4x)*(25x^2-40xy+64y^2)$, $(25x^2-40xy+64y^2)*(8y+4x)$, $(4x^1+8y^1)(25x^2-40x^1y^1+64y^2)$, $(25x^2-40x^1y^1+64y^2)(4x^1+8y^1)$, $(4x^1+8y^1)*(25x^2-40x^1y^1+64y^2)$, $(25x^2-40x^1y^1+64y^2)*(4x^1+8y^1)$, $(5x+8y)(64y^2-40xy+25x^2)$, $(64y^2-40xy+25x^2)(5x+8y)$, $(5x+8y)*(64y^2-40xy+25x^2)$, $(64y^2-40xy+25x^2)*(5x+8y)$, $(4x^1+8y^1)(64y^2-40x^1y^1+25x^2)$, $(64y^2-40x^1y^1+25x^2)(4x^1+8y^1)$, $(4x^1+8y^1)*(64y^2-40x^1y^1+25x^2)$, $(64y^2-40x^1y^1+25x^2)*(4x^1+8y^1)$, $(8y+4x)(64y^2-40xy+25x^2)$, $(64y^2-40xy+25x^2)(8y+4x)$, $(8y+4x)*(64y^2-40xy+25x^2)$, $(64y^2-40xy+25x^2)*(8y+4x)$, $(8y^1+4x^1)(64y^2-40x^1y^1+25x^2)$, $(64y^2-40x^1y^1+25x^2)(8y^1+4x^1)$, $(8y^1+4x^1)*(64y^2-40x^1y^1+25x^2)$, $(64y^2-40x^1y^1+25x^2)*(8y^1+4x^1)$, $(5x+8y)(25x^2-40yx+64y^2)$, $(25x^2-40yx+64y^2)(5x+8y)$, $(5x+8y)*(25x^2-40yx+64y^2)$, $(25x^2-40yx+64y^2)*(5x+8y)$, $(4x^1+8y^1)(25x^2-28y^1x^1+64y^2)$, $(25x^2-28y^1x^1+64y^2)(4x^1+8y^1)$, $(4x^1+8y^1)*(25x^2-28y^1x^1+64y^2)$, $(25x^2-28y^1x^1+64y^2)*(4x^1+8y^1)$, $(8y+4x)(25x^2-40yx+64y^2)$, $(25x^2-40yx+64y^2)(8y+4x)$, $(8y+4x)*(25x^2-40yx+64y^2)$, $(25x^2-40yx+64y^2)*(8y+4x)$, $(4x^1+8y^1)(25x^2-28y^1x^1+64y^2)$, $(25x^2-28y^1x^1+64y^2)(4x^1+8y^1)$, $(4x^1+8y^1)*(25x^2-28y^1x^1+64y^2)$, $(25x^2-28y^1x^1+64y^2)*(4x^1+8y^1)$, $(5x+8y)(64y^2-40yx+25x^2)$, $(64y^2-40yx+25x^2)(5x+8y)$, $(5x+8y)*(64y^2-40yx+25x^2)$, $(64y^2-40yx+25x^2)*(5x+8y)$, $(4x^1+8y^1)(64y^2-28y^1x^1+25x^2)$, $(64y^2-28y^1x^1+25x^2)(4x^1+8y^1)$, $(4x^1+8y^1)*(64y^2-28y^1x^1+25x^2)$, $(64y^2-28y^1x^1+25x^2)*(4x^1+8y^1)$, $(8y+4x)(64y^2-40yx+25x^2)$, $(64y^2-40yx+25x^2)(8y+4x)$, $(8y+4x)*(64y^2-40yx+25x^2)$, $(64y^2-40yx+25x^2)*(8y+4x)$, $(8y^1+4x^1)(64y^2-28y^1x^1+25x^2)$, $(64y^2-28y^1x^1+25x^2)(8y^1+4x^1)$, $(8y^1+4x^1)*(64y^2-28y^1x^1+25x^2)$, $(64y^2-28y^1x^1+25x^2)*(8y^1+4x^1)$

Question: Factor the expression given below. Write each factor as a polynomial in descending order. Enter exponents using the caret (^). For example, you would enter x^2 as x^2 .

$$125x^3 + 512y^3$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: $(5x + 8y)(25x^2 - 40xy + 64y^2)$.

Alg

Question 7c of 15 (3 Factoring A Sum Or Difference of Two Cubes 297457)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

(3x+7y)(9x²-21xy+49y²), (9x²-21xy+49y²)(3x+7y), (3x+7y)*(9x²-21xy+49y²), (9x²-21xy+49y²)*(3x+7y), (3x¹+7y¹)(9x²-21x¹y¹+49y²), (9x²-21x¹y¹+49y²)(3x¹+7y¹), (3x¹+7y¹)*(9x²-21x¹y¹+49y²), (9x²-21x¹y¹+49y²)*(3x¹+7y¹), (7y+3x)(9x²-21xy+49y²), (9x²-21xy+49y²)(7y+3x), (7y+3x)*(9x²-21xy+49y²), (9x²-21xy+49y²)*(7y+3x), (3x¹+7y¹)(9x²-21x¹y¹+49y²), (9x²-21x¹y¹+49y²)(3x¹+7y¹), (3x¹+7y¹)*(9x²-21x¹y¹+49y²), (9x²-21x¹y¹+49y²)*(3x¹+7y¹), (3x+7y)(49y²-21xy+9x²), (49y²-21xy+9x²)(3x+7y), (3x+7y)*(49y²-21xy+9x²), (49y²-21xy+9x²)*(3x+7y), (3x¹+7y¹)(49y²-21x¹y¹+9x²), (49y²-21x¹y¹+9x²)(3x¹+7y¹), (3x¹+7y¹)*(49y²-21x¹y¹+9x²), (49y²-21x¹y¹+9x²)*(3x¹+7y¹), (7y+3x)(49y²-21xy+9x²), (49y²-21xy+9x²)(7y+3x), (7y+3x)*(49y²-21xy+9x²), (49y²-21xy+9x²)*(7y+3x), (7y¹+3x¹)(49y²-21x¹y¹+9x²), (49y²-21x¹y¹+9x²)(7y¹+3x¹), (7y¹+3x¹)*(49y²-21x¹y¹+9x²), (49y²-21x¹y¹+9x²)*(7y¹+3x¹), (3x+7y)(9x²-21yx+49y²), (9x²-21yx+49y²)(3x+7y), (3x+7y)*(9x²-21yx+49y²), (9x²-21yx+49y²)*(3x+7y), (3x¹+7y¹)(9x²-21y¹x¹+49y²), (9x²-21y¹x¹+49y²)(3x¹+7y¹), (3x¹+7y¹)*(9x²-21y¹x¹+49y²), (9x²-21y¹x¹+49y²)*(3x¹+7y¹), (7y+3x)(9x²-21yx+49y²), (9x²-21yx+49y²)(7y+3x), (7y+3x)*(9x²-21yx+49y²), (9x²-21yx+49y²)*(7y+3x), (3x¹+7y¹)(9x²-21y¹x¹+49y²), (9x²-21y¹x¹+49y²)(3x¹+7y¹), (3x¹+7y¹)*(9x²-21y¹x¹+49y²), (9x²-21y¹x¹+49y²)*(3x¹+7y¹), (3x+7y)(49y²-21yx+9x²), (49y²-21yx+9x²)(3x+7y), (3x+7y)*(49y²-21yx+9x²), (49y²-21yx+9x²)*(3x+7y), (3x¹+7y¹)(49y²-21y¹x¹+9x²), (49y²-21y¹x¹+9x²)(3x¹+7y¹), (3x¹+7y¹)*(49y²-21y¹x¹+9x²), (49y²-21y¹x¹+9x²)*(3x¹+7y¹), (7y+3x)(49y²-21yx+9x²), (49y²-21yx+9x²)(7y+3x), (7y+3x)*(49y²-21yx+9x²), (49y²-21yx+9x²)*(7y+3x), (7y¹+3x¹)(49y²-21y¹x¹+9x²), (49y²-21y¹x¹+9x²)(7y¹+3x¹), (7y¹+3x¹)*(49y²-21y¹x¹+9x²), (49y²-21y¹x¹+9x²)*(7y¹+3x¹)

Correct Answer:

Question:

Factor the expression given below. Write each factor as a polynomial in descending order. Enter exponents using the caret (^). For example, you would enter x² as x^2.

$$27x^3 + 343y^3$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: (3x + 7y)(9x ² - 21xy + 49y ²).

Alg

Question 8a of 15 (3 Factoring A Sum Or Difference of Two Cubes 90937)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

(5x+7y)(25x²-35xy+49y²), (25x²-35xy+49y²)(5x+7y), (5x+7y)*(25x²-35xy+49y²), (25x²-35xy+49y²)*(5x+7y), (5x¹+7y¹)(25x²-35x¹y¹+49y²), (25x²-35x¹y¹+49y²)(5x¹+7y¹), (5x¹+7y¹)*(25x²-35x¹y¹+49y²), (25x²-35x¹y¹+49y²)*(5x¹+7y¹), (7y+5x)(25x²-35xy+49y²), (25x²-35xy+49y²)(7y+5x), (7y+5x)*(25x²-35xy+49y²), (25x²-35xy+49y²)*(7y+5x), (5x¹+7y¹)(25x²-35x¹y¹+49y²), (25x²-35x¹y¹+49y²)(5x¹+7y¹), (5x¹+7y¹)*(25x²-35x¹y¹+49y²), (25x²-35x¹y¹+49y²)*(5x¹+7y¹), (5x+7y)(49y²-35xy+25x²), (49y²-35xy+25x²)(5x+7y), (5x+7y)*(49y²-35xy+25x²), (49y²-35xy+25x²)*(5x+7y), (5x¹+7y¹)(49y²-35x¹y¹+25x²), (49y²-35x¹y¹+25x²)(5x¹+7y¹), (5x¹+7y¹)*(49y²-35x¹y¹+25x²), (49y²-35x¹y¹+25x²)*(5x¹+7y¹), (7y+5x)(49y²-35xy+25x²), (49y²-35xy+25x²)(7y+5x), (7y+5x)*(49y²-35xy+25x²), (49y²-35xy+25x²)*(7y+5x), (7y¹+5x¹)(49y²-35x¹y¹+25x²), (49y²-35x¹y¹+25x²)(7y¹+5x¹), (7y¹+5x¹)*(49y²-35x¹y¹+25x²), (49y²-35x¹y¹+25x²)*(7y¹+5x¹), (5x+7y)(25x²-35yx+49y²), (25x²-35yx+49y²)(5x+7y), (5x+7y)*(25x²-35yx+49y²), (25x²-35yx+49y²)*(5x+7y), (5x¹+7y¹)(25x²-35y¹x¹+49y²), (25x²-35y¹x¹+49y²)(5x¹+7y¹), (5x¹+7y¹)*(25x²-35y¹x¹+49y²), (25x²-35y¹x¹+49y²)*(5x¹+7y¹), (7y+5x)(25x²-35yx+49y²), (25x²-35yx+49y²)(7y+5x), (7y+5x)*(25x²-35yx+49y²), (25x²-35yx+49y²)*(7y+5x), (5x¹+7y¹)(25x²-35y¹x¹+49y²), (25x²-35y¹x¹+49y²)(5x¹+7y¹), (5x¹+7y¹)*(25x²-35y¹x¹+49y²), (25x²-35y¹x¹+49y²)*(5x¹+7y¹), (5x+7y)(49y²-35yx+25x²), (49y²-35yx+25x²)(5x+7y), (5x+7y)*(49y²-35yx+25x²), (49y²-35yx+25x²)*(5x+7y), (5x¹+7y¹)(49y²-35y¹x¹+25x²), (49y²-35y¹x¹+25x²)(5x¹+7y¹), (5x¹+7y¹)*(49y²-35y¹x¹+25x²), (49y²-35y¹x¹+25x²)*(5x¹+7y¹), (7y+5x)(49y²-35yx+25x²), (49y²-35yx+25x²)(7y+5x), (7y+5x)*(49y²-35yx+25x²), (49y²-35yx+25x²)*(7y+5x), (7y¹+5x¹)(49y²-35y¹x¹+25x²), (49y²-35y¹x¹+25x²)(7y¹+5x¹), (7y¹+5x¹)*(49y²-35y¹x¹+25x²), (49y²-35y¹x¹+25x²)*(7y¹+5x¹)

Correct Answer:

Question:

Factor the expression given below. Write each factor as a polynomial in descending order. Enter exponents using the caret (^). For example, you would enter x² as x^2.

$$125x^3 + 343y^3$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: (5x + 7y)(25x ² - 35xy + 49y ²).

Alg

Question 8b of 15 (3 Factoring A Sum Or Difference of Two Cubes 297459)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

(5x+6y)(25x²-30xy+36y²), (25x²-30xy+36y²)(5x+6y), (5x+6y)*(25x²-30xy+36y²), (25x²-30xy+36y²)*(5x+6y), (5x¹+6y¹)(25x²-30x¹y¹+36y²), (25x²-30x¹y¹+36y²)(5x¹+6y¹), (5x¹+6y¹)*(25x²-30x¹y¹+36y²), (25x²-30x¹y¹+36y²)*(5x¹+6y¹), (6y+5x)(25x²-30xy+36y²), (25x²-30xy+36y²)(6y+5x), (6y+5x)*(25x²-30xy+36y²), (25x²-30xy+36y²)*(6y+5x), (5x¹+6y¹)(25x²-30x¹y¹+36y²), (25x²-30x¹y¹+36y²)(5x¹+6y¹), (5x¹+6y¹)*(25x²-30x¹y¹+36y²), (25x²-30x¹y¹+36y²)*(5x¹+6y¹), (5x+6y)(36y²-30xy+25x²), (36y²-30xy+25x²)(5x+6y), (5x+6y)*(36y²-30xy+25x²), (36y²-30xy+25x²)*(5x+6y), (5x¹+6y¹)(36y²-30x¹y¹+25x²), (36y²-30x¹y¹+25x²)(5x¹+6y¹), (5x¹+6y¹)*(36y²-30x¹y¹+25x²), (36y²-30x¹y¹+25x²)*(5x¹+6y¹), (6y+5x)(36y²-30xy+25x²), (36y²-30xy+25x²)(6y+5x), (6y+5x)*(36y²-30xy+25x²), (36y²-30xy+25x²)*(6y+5x), (6y¹+5x¹)(36y²-30x¹y¹+25x²), (36y²-30x¹y¹+25x²)(6y¹+5x¹), (6y¹+5x¹)*(36y²-30x¹y¹+25x²), (36y²-30x¹y¹+25x²)*(6y¹+5x¹), (5x+6y)(25x²-30yx+36y²), (25x²-30yx+36y²)(5x+6y), (5x+6y)*(25x²-30yx+36y²), (25x²-30yx+36y²)*(5x+6y), (5x¹+6y¹)(25x²-30y¹x¹+36y²), (25x²-30y¹x¹+36y²)(5x¹+6y¹), (5x¹+6y¹)*(25x²-30y¹x¹+36y²), (25x²-30y¹x¹+36y²)*(5x¹+6y¹), (6y+5x)(25x²-30yx+36y²), (25x²-30yx+36y²)(6y+5x), (6y+5x)*(25x²-30yx+36y²), (25x²-30yx+36y²)*(6y+5x), (5x¹+6y¹)(25x²-30y¹x¹+36y²), (25x²-30y¹x¹+36y²)(5x¹+6y¹), (5x¹+6y¹)*(25x²-30y¹x¹+36y²), (25x²-30y¹x¹+36y²)*(5x¹+6y¹), (5x+6y)(36y²-30yx+25x²), (36y²-30yx+25x²)(5x+6y), (5x+6y)*(36y²-30yx+25x²), (36y²-30yx+25x²)*(5x+6y), (5x¹+6y¹)(36y²-30y¹x¹+25x²), (36y²-30y¹x¹+25x²)(5x¹+6y¹), (5x¹+6y¹)*(36y²-30y¹x¹+25x²), (36y²-30y¹x¹+25x²)*(5x¹+6y¹), (6y+5x)(36y²-30yx+25x²), (36y²-30yx+25x²)(6y+5x), (6y+5x)*(36y²-30yx+25x²), (36y²-30yx+25x²)*(6y+5x), (6y¹+5x¹)(36y²-30y¹x¹+25x²), (36y²-30y¹x¹+25x²)(6y¹+5x¹), (6y¹+5x¹)*(36y²-30y¹x¹+25x²), (36y²-30y¹x¹+25x²)*(6y¹+5x¹)

Correct Answer:

Question:

Factor the expression given below. Write each factor as a polynomial in descending order. Enter exponents using the caret (^). For example, you would enter x² as x^2.

$$125x^3 + 216y^3$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: (5x + 6y)(25x ² - 30xy + 36y ²).

Alg

Question 8c of 15 (3 Factoring A Sum Or Difference of Two Cubes 297460)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

(7x+6y)(49x²-42xy+36y²), (49x²-42xy+36y²)(7x+6y), (7x+6y)*(49x²-42xy+36y²), (49x²-42xy+36y²)*(7x+6y), (7x¹+6y¹)(49x²-42x¹y¹+36y²), (49x²-42x¹y¹+36y²)(7x¹+6y¹), (7x¹+6y¹)*(49x²-42x¹y¹+36y²), (49x²-42x¹y¹+36y²)*(7x¹+6y¹), (6y+7x)(49x²-42xy+36y²), (49x²-42xy+36y²)(6y+7x), (6y+7x)*(49x²-42xy+36y²), (49x²-42xy+36y²)*(6y+7x), (7x¹+6y¹)(49x²-42x¹y¹+36y²), (49x²-42x¹y¹+36y²)(7x¹+6y¹), (7x¹+6y¹)*(49x²-42x¹y¹+36y²), (49x²-42x¹y¹+36y²)*(7x¹+6y¹), (7x+6y)(36y²-42xy+49x²), (36y²-42xy+49x²)(7x+6y), (7x+6y)*(36y²-42xy+49x²), (36y²-42xy+49x²)*(7x+6y), (7x¹+6y¹)(36y²-42x¹y¹+49x²), (36y²-42x¹y¹+49x²)(7x¹+6y¹), (7x¹+6y¹)*(36y²-42x¹y¹+49x²), (36y²-42x¹y¹+49x²)*(7x¹+6y¹), (6y+7x)(36y²-42xy+49x²), (36y²-42xy+49x²)(6y+7x), (6y+7x)*(36y²-42xy+49x²), (36y²-42xy+49x²)*(6y+7x), (6y¹+7x¹)(36y²-42x¹y¹+49x²), (36y²-42x¹y¹+49x²)(6y¹+7x¹), (6y¹+7x¹)*(36y²-42x¹y¹+49x²), (36y²-42x¹y¹+49x²)*(6y¹+7x¹), (7x+6y)(49x²-42yx+36y²), (49x²-42yx+36y²)(7x+6y), (7x+6y)*(49x²-42yx+36y²), (49x²-42yx+36y²)*(7x+6y), (7x¹+6y¹)(49x²-42y¹x¹+36y²), (49x²-42y¹x¹+36y²)(7x¹+6y¹), (7x¹+6y¹)*(49x²-42y¹x¹+36y²), (49x²-42y¹x¹+36y²)*(7x¹+6y¹), (6y+7x)(49x²-42yx+36y²), (49x²-42yx+36y²)(6y+7x), (6y+7x)*(49x²-42yx+36y²), (49x²-42yx+36y²)*(6y+7x), (7x¹+6y¹)(49x²-42y¹x¹+36y²), (49x²-42y¹x¹+36y²)(7x¹+6y¹), (7x¹+6y¹)*(49x²-42y¹x¹+36y²), (49x²-42y¹x¹+36y²)*(7x¹+6y¹), (7x+6y)(36y²-42yx+49x²), (36y²-42yx+49x²)(7x+6y), (7x+6y)*(36y²-42yx+49x²), (36y²-42yx+49x²)*(7x+6y), (7x¹+6y¹)(36y²-42y¹x¹+49x²), (36y²-42y¹x¹+49x²)(7x¹+6y¹), (7x¹+6y¹)*(36y²-42y¹x¹+49x²), (36y²-42y¹x¹+49x²)*(7x¹+6y¹), (6y+7x)(36y²-42yx+49x²), (36y²-42yx+49x²)(6y+7x), (6y+7x)*(36y²-42yx+49x²), (36y²-42yx+49x²)*(6y+7x), (6y¹+7x¹)(36y²-42y¹x¹+49x²), (36y²-42y¹x¹+49x²)(6y¹+7x¹), (6y¹+7x¹)*(36y²-42y¹x¹+49x²), (36y²-42y¹x¹+49x²)*(6y¹+7x¹)

Correct Answer:

Question:

Factor the expression given below. Write each factor as a polynomial in descending order. Enter exponents using the caret (^). For example, you would enter x² as x^2.

$$343x^3 + 216y^3$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: (7x + 6y)(49x ² - 42xy + 36y ²).

Question 9a of 15 (3 Factoring A Sum Or Difference of Two Cubes 120917)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following is the correct factorization of the polynomial below?

$$x^3 - 15$$

	Choice	Feedback
A.	(x + 3)(x - 5)	
B.	(x - 3)(x + 5)	
C.	(x + 3)(x ² - 4x + 5)	
*D.	The polynomial is irreducible.	

Global Incorrect Feedback

The correct answer is: The polynomial is irreducible.

Question 9b of 15 (3 Factoring A Sum Or Difference of Two Cubes 297462)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following is the correct factorization of the polynomial below?

$$x^3 - 18$$

	Choice	Feedback
A.	$(x + 3)(x - 6)$	
B.	$(x - 3)(x + 6)$	
C.	$(x + 3)(x^2 - 4x + 6)$	
*D.	The polynomial is irreducible.	

Global Incorrect Feedback

The correct answer is: The polynomial is irreducible.

Question 9c of 15 (3 Factoring A Sum Or Difference of Two Cubes 297463)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following is the correct factorization of the polynomial below?

$$x^3 - 12$$

	Choice	Feedback
A.	$(x + 3)(x - 4)$	
B.	$(x - 3)(x + 4)$	
C.	$(x + 3)(x^2 - 4x + 4)$	
*D.	The polynomial is irreducible.	

Global Incorrect Feedback

The correct answer is: The polynomial is irreducible.

Question 10a of 15 (3 Factoring A Sum Or Difference of Two Cubes 120918)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following is the correct factorization of the polynomial below?

$$2x^2 - 12x + 18$$

	Choice	Feedback
*A.	$2(x - 3)^2$	
B.	$2(x + 6)(x + 3)$	
C.	$(2x + 6)(x + 3)$	
D.	The polynomial is irreducible.	

Global Incorrect FeedbackThe correct answer is: $2(x - 3)^2$.**Question 10b of 15** (3 Factoring A Sum Or Difference of Two Cubes 297465)**Maximum Attempts:** 1**Question Type:** Multiple Choice**Maximum Score:** 2**Question:** Which of the following is the correct factorization of the polynomial below?

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

	Choice	Feedback
A.	$2(x + 2)(x + 4)$	
B.	$(2x + 4)(x + 4)$	
*C.	$2(x - 2)^2$	
D.	The polynomial is irreducible.	

Global Incorrect FeedbackThe correct answer is: $2(x - 2)^2$.**Question 10c of 15** (3 Factoring A Sum Or Difference of Two Cubes 297466)**Maximum Attempts:** 1**Question Type:** Multiple Choice**Maximum Score:** 2**Question:** Which of the following is the correct factorization of the polynomial below?

$$2x^2 - 16x + 32$$

	Choice	Feedback
A.	$(2x + 4)(x + 2)$	
B.	$2(x + 2)(x + 8)$	
*C.	$2(x - 4)^2$	
D.	The polynomial is irreducible.	

Global Incorrect FeedbackThe correct answer is: $2(x - 4)^2$.**Question 11a of 15** (3 Factoring A Sum Or Difference of Two Cubes 120903)**Maximum Attempts:** 1**Question Type:** Multiple Choice**Maximum Score:** 2**Question:** Which of the following is the correct factorization of the polynomial below?

$$8x^3 + 27y^3$$

	Choice	Feedback
A.	$(4x + 3y)(2x + 9y)$	
*B.	$(2x + 3y)(4x^2 - 6xy + 9y^2)$	
C.	$(4x + 3y)(2x^2 - 2xy + 9y^2)$	
D.	The polynomial is irreducible.	

Global Incorrect Feedback
The correct answer is: $(2x + 3y)(4x^2 - 6xy + 9y^2)$.

Question 11b of 15 (3 Factoring A Sum Or Difference of Two Cubes 297467)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following is the correct factorization of the polynomial below?

$$8x^3 + 64y^3$$

	Choice	Feedback
A.	$(4x + 4y)(2x + 8y)$	
*B.	$(2x + 4y)(4x^2 - 8xy + 16y^2)$	
C.	$(4x + 2y)(4x^2 - 2xy + 16y^2)$	
D.	The polynomial is irreducible.	

Global Incorrect Feedback
The correct answer is: $(2x + 4y)(4x^2 - 8xy + 16y^2)$.

Question 11c of 15 (3 Factoring A Sum Or Difference of Two Cubes 297468)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following is the correct factorization of the polynomial below?

$$27x^3 + 64y^3$$

	Choice	Feedback
A.	$(4x + 3y)(2x + 8y)$	
B.	$(4x + 3y)(9x^2 - 12xy + 16y^2)$	
*C.	$(3x + 4y)(9x^2 - 12xy + 16y^2)$	
D.	The polynomial is irreducible.	

Global Incorrect Feedback
The correct answer is: $(3x + 4y)(9x^2 - 12xy + 16y^2)$.

Question 12a of 15 (3 Factoring A Sum Or Difference of Two Cubes 120905)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following is the correct factorization of the polynomial below?

$$p^3 - 125q^3$$

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	Choice	Feedback
*A.	$(p - 5q)(p^2 + 5pq + 25q^2)$	
B.	$(p - 25q)(p^2 + 25pq + 25q^2)$	
C.	$(p^2 + 10q)(p^3 + 25pq + 5q^2)$	
D.	The polynomial is irreducible.	

Global Incorrect Feedback

The correct answer is: $(p - 5q)(p^2 + 5pq + 25q^2)$.

Question 12b of 15 (3 Factoring A Sum Or Difference of Two Cubes 297469)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following is the correct factorization of the polynomial below?

$$p^3 - 216q^3$$

	Choice	Feedback
A.	$(p - 36q)(p^2 + 36pq + 6q^2)$	
B.	$(p^2 + 12q)(p^3 + 36pq + 5q^2)$	
*C.	$(p - 6q)(p^2 + 6pq + 36q^2)$	
D.	The polynomial is irreducible.	

Global Incorrect Feedback

The correct answer is: $(p - 6q)(p^2 + 6pq + 36q^2)$.

Question 12c of 15 (3 Factoring A Sum Or Difference of Two Cubes 297470)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following is the correct factorization of the polynomial below?

$$p^3 - 343q^3$$

	Choice	Feedback
A.	$(p - 49q)(p^2 + 7pq + 49q^2)$	
*B.	$(p - 7q)(p^2 + 7pq + 49q^2)$	
C.	$(p^2 + 7q)(p^3 + 49pq + 7q^2)$	
D.	The polynomial is irreducible.	

Global Incorrect Feedback

The correct answer is: $(p - 7q)(p^2 + 7pq + 49q^2)$.

Alg

Question 13a of 15 (3 Factoring A Sum Or Difference of Two Cubes 120908)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following is the correct factorization of the polynomial below?

$$2p^2 - 10pq + 25q^2$$

	Choice	Feedback
A.	$(2p - 5q)(p - 5q)$	
B.	$(2p - 5q)(p + 5q)$	
C.	$(2p - 5q)(2p^2 + 2q)$	
*D.	The polynomial is irreducible.	

Global Incorrect Feedback

The correct answer is: The polynomial is irreducible.

Question 13b of 15 (3 Factoring A Sum Or Difference of Two Cubes 297471)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following is the correct factorization of the polynomial below?

$$3p^2 - 15pq + 20q^2$$

	Choice	Feedback
A.	$(3p - 5q)(p - 10q)$	
B.	$(3p - 5q)(p + 5q)$	
C.	$(3p - 5q)(2p^2 + 5q)$	
*D.	The polynomial is irreducible.	

Global Incorrect Feedback

The correct answer is: The polynomial is irreducible.

Question 13c of 15 (3 Factoring A Sum Or Difference of Two Cubes 297472)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following is the correct factorization of the polynomial below?

$$2p^2 - 8pq + 24q^2$$

	Choice	Feedback
A.	$(2p - 4q)(p - 4q)$	
B.	$(2p - 4q)(p + 4q)$	
C.	$(2p - 4q)(2p^2 + 2q)$	
*D.	The polynomial is irreducible.	

Global Incorrect Feedback

The correct answer is: The polynomial is irreducible.

Alg

Question 14a of 15 (3 Factoring A Sum Or Difference of Two Cubes 120911)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following is the correct factorization of the polynomial below?

$$27x^3 + 64$$

	Choice	Feedback
*A.	$(3x + 4)(9x^2 - 12x + 16)$	
B.	$(9x + 8)(3x^2 - 16x + 8)$	
C.	$(3x^2 + 8)(9x - 16x + 8)$	
D.	The polynomial is irreducible.	

Global Incorrect Feedback

The correct answer is: $(3x + 4)(9x^2 - 12x + 16)$.

Question 14b of 15 (3 Factoring A Sum Or Difference of Two Cubes 297474)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following is the correct factorization of the polynomial below?

$$64x^3 + 27$$

	Choice	Feedback
A.	$(16x + 8)(3x^2 - 12x + 9)$	
*B.	$(4x + 3)(16x^2 - 12x + 9)$	
C.	$(3x^2 + 4)(3x - 16x + 16)$	
D.	The polynomial is irreducible.	

Global Incorrect Feedback

The correct answer is: $(4x + 3)(16x^2 - 12x + 9)$.

Question 14c of 15 (3 Factoring A Sum Or Difference of Two Cubes 297475)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following is the correct factorization of the polynomial below?

$$64x^3 + 125$$

	Choice	Feedback
A.	$(4x + 5)(16x^2 - 12x + 5)$	
*B.	$(4x + 5)(16x^2 - 20x + 25)$	
C.	$(16x^2 + 5)(5x - 16x + 125)$	
D.	The polynomial is irreducible.	

Global Incorrect Feedback
The correct answer is: $(4x + 5)(16x^2 - 20x + 25)$.

Question 15a of 15 (3 Factoring A Sum Or Difference of Two Cubes 120912)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following is the correct factorization of the polynomial below?

$$x^3 + 12x^2 + 36x$$

	Choice	Feedback
A.	$x(x + 6)(x - 6)$	
*B.	$x(x + 6)^2$	
C.	$(x^2 + 6x - 3)(x - 12)$	
D.	$(x^2 + 6x - 3)(x - 6)$	

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

Question 15b of 15 (3 Factoring A Sum Or Difference of Two Cubes 297476)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following is the correct factorization of the polynomial below?

$$x^3 + 10x^2 + 25x$$

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

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

Question 15c of 15 (3 Factoring A Sum Or Difference of Two Cubes 297478)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following is the correct factorization of the polynomial below?

$$x^3 + 14x^2 + 49x$$

	Choice	Feedback
A.	$x(x + 7)(x - 7)$	
B.	$(x^2 + 7x - 2)(x - 7)$	
C.	$(x^2 + 7x - 2)(x - 14)$	
*D.	$x(x + 7)^2$	

Alg

Global Incorrect Feedback

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