PREVIEW CLOSE

Test (CS): Polynomials

Question 1 of 25 (90791)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 3
Question: Which of the expressions are monomials? Check all that apply.

Correct Answers:

	Choice
*A.	$3x^2$
*B.	$-x^9$
C.	$2x^{-1}$
*D.	16
E.	$x^2 - 2$
F.	$\sqrt{x}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $3x^2$, $-x^9$, and 16.

Question 2 of 25 (284761)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 3
Question: Which of the expressions are monomials? Check all that apply.

Correct Answers:

	Choice
A.	
B.	$9x^2 - 2$
*C.	$3x^{10}$
*D.	16
*E.	$2x$
F.	$5x^{-1}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $3x^{10}$, 16, and $2x$.

Question 3 of 25 (90792)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 3
Question: Which of the expressions are *not* polynomials? Check all that apply.

Correct Answers:

	Choice
*A.	$x^2 \quad \sqrt{x} \quad 3$
B.	$4 - 3x + 5x^6$
*C.	$5x^{1/2} + 4x^2$
D.	$14x^7$
*E.	$\frac{x^2 \quad x \quad 12}{x+3}$
F.	$8x^{10} + 2x^5$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $x^2 \quad \sqrt{x} \quad 3$, $5x^{1/2} + 4x^2$, and $\frac{x^2 - x - 12}{x \quad 3}$.

Question 4 of 25 (284763)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 3
Question: Which of the expressions are *not* polynomials? Check all that apply.

Correct Answers:

	Choice
A.	$5x^5$
*B.	$5x^{-1} + 4x^{-2}$
C.	$x^5 + 2$
*D.	
*E.	$x^2 +$ $+ 4$
F.	$8x^{10} + 2x^5$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answers are: $5x^{-1} + 4x^{-2}$, , and $x^2 +$ $+ 4$.

Question 5 of 25 (90793)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 3
Is Case Sensitive: false
Correct Answer: 7
Question: What is the degree of the polynomial in the expression below?

$x^6 + 3 - 2x^2 + 4x^7 - 4x$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 7.

Question 6 of 25 (284765)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 3
Is Case Sensitive: false
Correct Answer: 9
Question: What is the degree of the polynomial in the expression below?

$x^5 + 1 - 3x^4 + 3x^9 - 2x$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 9.

Question 7 of 25 (90794)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 3
Is Case Sensitive: false
Correct Answer: -2
Question: What is the coefficient of the term of degree 2 in the polynomial below?

$x^6 + 3 - 2x^2 + 4x^7 - 4x$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: -2.

Question 8 of 25 (284767)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 3
Is Case Sensitive: false
Correct Answer: 5
Question: What is the coefficient of the term of degree 7 in the polynomial below?

$2x^6 + 2 - 4x^2 + 5x^7 - 4x$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 5.

Question 9 of 25 (90795)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 3
Question: Which answer is equal to the sum in the expression below?

$(3x^3 + 4x^2 - 2x + 1) + (x^4 - x^3 + 5x^2 + 2x + 3)$

	Choice	Feedback
A.	$x^4 + 2x^3 + 9x^2 + 4x + 4$	
B.	$x^4 + 4x^3 + 9x^2 + 4$	
C.	$x^4 + 2x^3 + 9x^2 - 4x + 4$	
***D.**	$x^4 + 2x^3 + 9x^2 + 4$	

Global Incorrect Feedback
The correct answer is: $x^4 + 2x^3 + 9x^2 + 4$.

Question 10 of 25 (284769)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 3
Question: Which answer is equal to the sum in the expression below?

$(4x^3 + 2x^2 - x + 2) + (2x^4 - 3x^3 + 5x^2 + 6x + 3)$

	Choice	Feedback
***A.**	$2x^4 + x^3 + 7x^2 + 5x + 5$	
B.	$2x^4 + x^3 + 7x^2 + 5$	
C.	$2x^4 + x^3 + 7x^2 - 5x + 5$	
D.	$2x^4 + 2x^3 + 7x^2 + 5x + 5$	

Global Incorrect Feedback
The correct answer is: $2x^4 + x^3 + 7x^2 + 5x + 5$.

Question 11 of 25 (90796)

Maximum Attempts: 1
Question Type: True-False
Maximum Score: 3
Question: When calculated, the sums in the expressions below are equal.

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

$6x^3 - 2x^2 + 2x + 1$
$+ \; 2x^3 + 2x^2 - 5x - 4$

	Choice	Feedback
A.	True	
***B.**	False	

Global Incorrect Feedback
The correct answer is: False.

Question 12 of 25 (284771)

Maximum Attempts: 1
Question Type: True-False
Maximum Score: 3
Question: When calculated, the sums in the expressions below are equal.

$(4x^3 - 3x + 1) + (2x^3 - x^2 + 7x - 7)$

$6x^3 - 2x^2 + 4x - 6$
$+ \; x^3 - 2x^2 + 2x + 1$

	Choice	Feedback
A.	True	
***B.**	False	

Global Incorrect Feedback
The correct answer is: False.

Question 13 of 25 (90797)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 3
Question: Which answer is equal to the difference in the expression below?

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

	Choice	Feedback
***A.**	$2x^3 + x^2 - 2x - 4$	
B.	$2x^3 - 9x^2 - 2x - 4$	
C.	$2x^3 + x^2 + 4x - 4$	
D.	$2x^3 + x^2 - 2x$	

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

Question 14 of 25 (284773)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 3
Question: Which answer is equal to the difference in the expression below?

$(2x^3 - 6x^2 + 2x - 2) - (-2x^3 - 3x^2 + 3x + 3)$

	Choice	Feedback
A.	$4x^3 - 3x^2 - 5$	
B.	$4x^3 - 3x^2 + x - 5$	
C.	$4x^3 + 9x^2 + x - 5$	
***D.**	$4x^3 - 3x^2 - x - 5$	

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

Question 15 of 25 (90798)

Maximum Attempts: 1
Question Type: True-False
Maximum Score: 3
Question: When calculated, the two differences given below are equal.

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

$5x^4 - 2x^3 + 3x^2 - 2x - 4$
$(2x^4 - 2x^3 + 7x^2 + 2x - 5)$

	Choice	Feedback
***A.**	True	
B.	False	

Global Incorrect Feedback
The correct answer is: True.

Question 16 of 25 (284775)

Maximum Attempts: 1
Question Type: True-False
Maximum Score: 3
Question: When calculated, the two differences given below are equal.

	Choice	Feedback
A.	True	
***B.**	False	

Global Incorrect Feedback
The correct answer is: False.

Question 17 of 25 (90799)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 3
Question: Which answer shows the FOIL method used to expand the product below?

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

A. $2x \cdot 2x^2 + 2x \cdot (-5) + 3 \cdot 2x + 3 \cdot (-5)$
B. $2x \cdot 2x^2 + 2x \cdot (-5) + 3 \cdot 2x^2 + 3 \cdot (-5)$
C. $2x \cdot 2x^2 - 3 \cdot 2x^2 + 2x^2 \cdot (-5) + 3 \cdot (-5)$

	Choice	Feedback
A.	Answer A	
***B.**	Answer B	
C.	Answer C	

Global Incorrect Feedback
The correct answer is Answer B.

Question 18 of 25 (284777)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 3
Question: Which answer shows the FOIL method used to expand the product below?

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

A. $3x \cdot 3x^2 + 3x \cdot 4 + 2 \cdot 3x^2 + 2 \cdot 4$
B. $3x \cdot 3x^2 + 3x \cdot 4 + 3 \cdot 3x + 2 \cdot 4$
C. $3x \cdot 3x^2 + 2 \cdot 3x^2 + 3x^2 \cdot x + 2 \cdot 1$

	Choice	Feedback
***A.**	Answer A	
B.	Answer B	
C.	Answer C	

Global Incorrect Feedback
The correct answer is: Answer A.

Question 19 of 25 (90800)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 3
Is Case Sensitive: false
Correct Answer: -10
Question: Below you can see a table set up to multiply two polynomials. What is the coefficient of the x^3-term of the product?

	x^3	$-3x^2$	3
$4x$			
2			

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is -10.

Question 20 of 25 (284779)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 3
Is Case Sensitive: false
Correct Answer: -2
Question: Below you can see a table set up to multiply two polynomials. What is the coefficient of the x^3-term of the product?

	x^3	$-3x^2$	4
$2x$			
4			

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: -2.

Question 21 of 25 (90801)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 3
Question: Which answer is equal to the product in the expression below?

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

	Choice	Feedback
A.	$6x^4 + 5x^3 - 3x^2 + 2x$	
B.	$5x^4 + 2x^3 - 8x^2 + 2x$	
C.	$6x^4 + 5x^3 - 9x^2 - 2x$	
***D.**	$6x^4 + 5x^3 - 9x^2 + 2x$	

Global Incorrect Feedback
The correct answer is: $6x^4 + 5x^3 - 9x^2 + 2x$.

Question 22 of 25 (284781)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 3
Question: Which answer is equal to the product in the expression below?

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

	Choice	Feedback
A.	$6x^4 + 5x^3 - 8x^2 + 3x$	
***B.**	$6x^4 - 5x^3 - 8x^2 + 3x$	
C.	$5x^4 - 5x^3 - 7x^2 - 3x$	
D.	$6x^4 - 5x^3 - 8x^2 - 3x$	

Global Incorrect Feedback
The correct answer is: $6x^4 - 5x^3 - 8x^2 + 3x$.

Question 23 of 25 (90802)

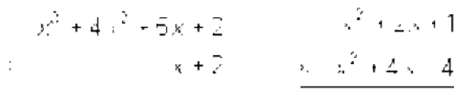
Maximum Attempts: 1
Question Type: True-False
Maximum Score: 3
Question: When calculated, the two products given below are equal.

	Choice	Feedback
***A.**	True	
B.	False	

Global Incorrect Feedback
The correct answer is: True.

Question 24 of 25 (284783)

Maximum Attempts: 1
Question Type: True-False
Maximum Score: 3
Question: When calculated, the two products given below are equal.



	Choice	Feedback
*A.	True	
B.	False	

Global Incorrect Feedback
The correct answer is: True.

Question 25 of 25 (90808)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 3
Question: Which answer is equal to the product in the expression below?

$(3x - 5)(3x + 5)$

	Choice	Feedback
A.	$6x - 25$	
B.	$9x^2 - 30x - 25$	
C.	$9x^2 - 15x - 25$	
*D.	$9x^2 - 25$	

Global Incorrect Feedback
The correct answer is: $9x^2 - 25$.