

[PREVIEW](#)[CLOSE](#)**Quiz: Finding GCFs of Polynomials****Question 1a of 8** ( 2 Identifying the greatest common factor (GCF) in a polynomial 91016 )**Maximum Attempts:** 1**Question Type:** Text Fill In Blank**Maximum Score:** 2**Is Case Sensitive:** false**Correct Answer:**  $3x, x^3, 3x^1, 3*x, x^3, 3*x^1$ **Question:** What is the greatest common factor of the terms of the polynomial below?

$$3x^4 + 18x$$

Attempt	Incorrect Feedback
1st	
Correct Feedback	
Global Incorrect Feedback	
	The correct answer is: $3x$ .

**Question 1b of 8** ( 2 Identifying the greatest common factor (GCF) in a polynomial 294955 )**Maximum Attempts:** 1**Question Type:** Text Fill In Blank**Maximum Score:** 2**Is Case Sensitive:** false**Correct Answer:**  $4x, x^4, 4x^1, 4*x, x^4, 4*x^1$ **Question:** What is the greatest common factor of the terms of the polynomial below?

$$4x^4 + 16x$$

Attempt	Incorrect Feedback
1st	
Correct Feedback	
Global Incorrect Feedback	
	The correct answer is: $4x$ .

**Question 1c of 8** ( 2 Identifying the greatest common factor (GCF) in a polynomial 294956 )**Maximum Attempts:** 1**Question Type:** Text Fill In Blank**Maximum Score:** 2**Is Case Sensitive:** false**Correct Answer:**  $5x, x^5, 5x^1, 5*x, x^5, 5*x^1$ **Question:** What is the greatest common factor of the terms of the polynomial below?

$$5x^4 + 15x$$

Attempt	Incorrect Feedback
1st	
Correct Feedback	

	<b>Global Incorrect Feedback</b>
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	The correct answer is: $5x$ .
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## Question 2a of 8 ( 2 Identifying the greatest common factor (GCF) in a polynomial 91017 )

**Maximum Attempts:** 1

**Question Type:** Text Fill In Blank

**Maximum Score:** 2

**Is Case Sensitive:** false

**Correct Answer:**  $2x^3, 2*x^3, x^3*2$

**Question:** What is the greatest common factor of the terms of the polynomial below?  
Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ .

$$14x^5 + 10x^3$$

<b>Attempt</b>	<b>Incorrect Feedback</b>
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1st	
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	<b>Correct Feedback</b>
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	<b>Global Incorrect Feedback</b>
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	The correct answer is: $2x^3$ .
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## Question 2b of 8 ( 2 Identifying the greatest common factor (GCF) in a polynomial 294957 )

**Maximum Attempts:** 1

**Question Type:** Text Fill In Blank

**Maximum Score:** 2

**Is Case Sensitive:** false

**Correct Answer:**  $2x^3, 2*x^3, x^3*2$

**Question:** What is the greatest common factor of the terms of the polynomial below?  
Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ .

$$14x^5 + 6x^3$$

<b>Attempt</b>	<b>Incorrect Feedback</b>
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1st	
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	<b>Correct Feedback</b>
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	<b>Global Incorrect Feedback</b>
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	The correct answer is: $2x^3$ .
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## Question 2c of 8 ( 2 Identifying the greatest common factor (GCF) in a polynomial 294958 )

**Maximum Attempts:** 1

**Question Type:** Text Fill In Blank

**Maximum Score:** 2

**Is Case Sensitive:** false

**Correct Answer:**  $7x^3, 7*x^3, x^3*7$

**Question:** What is the greatest common factor of the terms of the polynomial below?  
Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ .

$$14x^5 + 7x^3$$

<b>Attempt</b>	<b>Incorrect Feedback</b>
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1st	
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	<b>Correct Feedback</b>
	<b>Global Incorrect Feedback</b>
	The correct answer is: $7x^3$ .

### Question 3a of 8 ( 3 Using the grouping method to factor one or more GCFs out of a polynomial 91018 )

**Maximum Attempts:**

1

**Question Type:**

Text Fill In Blank

**Maximum Score:**

2

**Is Case Sensitive:**

false

**Correct Answer:**

$6x(x^4+6x+4)$ ,  $(x^4+6x+4)6x$ ,  $6x*(x^4+6x+4)$ ,  $(x^4+6x+4)*6x$ ,  
 $(6x)(x^4+6x+4)$ ,  $(x^4+6x+4)(6x)$ ,  $(6x)*(x^4+6x+4)$ ,  $(x^4+6x+4)*(6x)$ ,  
 $6x(1x^4+6x+4)$ ,  $(1x^4+6x+4)6x$ ,  $6x*(1x^4+6x+4)$ ,  $(1x^4+6x+4)*6x$ ,  
 $(6x)(1x^4+6x+4)$ ,  $(1x^4+6x+4)(6x)$ ,  $(6x)*(1x^4+6x+4)$ ,  $(1x^4+6x+4)*(6x)$ ,  
 $6x^1(x^4+6x^1+4)$ ,  $(x^4+6x^1+4)6x^1$ ,  $6x^1*(x^4+6x^1+4)$ ,  
 $(x^4+6x^1+4)*6x^1$ ,  $(6x^1)(x^4+6x^1+4)$ ,  $(x^4+6x^1+4)(6x^1)$ ,  
 $(6x^1)*(x^4+6x^1+4)$ ,  $(x^4+6x^1+4)*(6x^1)$ ,  $6x^1(1x^4+6x^1+4)$ ,  
 $(1x^4+6x^1+4)6x^1$ ,  $6x^1*(1x^4+6x^1+4)$ ,  $(1x^4+6x^1+4)*6x^1$ ,  
 $(6x^1)(1x^4+6x^1+4)$ ,  $(1x^4+6x^1+4)(6x^1)$ ,  $(6x^1)*(1x^4+6x^1+4)$ ,  
 $(1x^4+6x^1+4)*(6x^1)$

**Question:**

Use the grouping method to factor the polynomial in the box completely. Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ . Write each factor as a polynomial in descending order.

$$6x^5 + 36x^2 + 24x$$

Attempt	Incorrect Feedback
1st	
	<b>Correct Feedback</b>
	<b>Global Incorrect Feedback</b>
	The correct answer is: $6x(x^4 + 6x + 4)$ .

### Question 3b of 8 ( 3 Using the grouping method to factor one or more GCFs out of a polynomial 294959 )

**Maximum Attempts:**

1

**Question Type:**

Text Fill In Blank

**Maximum Score:**

2

**Is Case Sensitive:**

false

**Correct Answer:**

$7x(x^4+7x+4)$ ,  $(x^4+7x+4)7x$ ,  $7x*(x^4+7x+4)$ ,  $(x^4+7x+4)*7x$ ,  
 $(7x)(x^4+7x+4)$ ,  $(x^4+7x+4)(7x)$ ,  $(7x)*(x^4+7x+4)$ ,  $(x^4+7x+4)*(7x)$ ,  
 $7x(1x^4+7x+4)$ ,  $(1x^4+7x+4)7x$ ,  $7x*(1x^4+7x+4)$ ,  $(1x^4+7x+4)*7x$ ,  
 $(7x)(1x^4+7x+4)$ ,  $(1x^4+7x+4)(7x)$ ,  $(7x)*(1x^4+7x+4)$ ,  $(1x^4+7x+4)*(7x)$ ,  
 $7x^1(x^4+7x^1+4)$ ,  $(x^4+7x^1+4)7x^1$ ,  $7x^1*(x^4+7x^1+4)$ ,  
 $(x^4+7x^1+4)*7x^1$ ,  $(7x^1)(x^4+7x^1+4)$ ,  $(x^4+7x^1+4)(7x^1)$ ,  
 $(7x^1)*(x^4+7x^1+4)$ ,  $(x^4+7x^1+4)*(7x^1)$ ,  $7x^1(1x^4+7x^1+4)$ ,  
 $(1x^4+7x^1+4)7x^1$ ,  $7x^1*(1x^4+7x^1+4)$ ,  $(1x^4+7x^1+4)*7x^1$ ,  
 $(7x^1)(1x^4+7x^1+4)$ ,  $(1x^4+7x^1+4)(7x^1)$ ,  $(7x^1)*(1x^4+7x^1+4)$ ,  
 $(1x^4+7x^1+4)*(7x^1)$

**Question:**

Use the grouping method to factor the polynomial in the box completely. Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ . Write each factor as a polynomial in descending order.

$$7x^5 + 49x^2 + 28x$$

Attempt	Incorrect Feedback
1st	
	<b>Correct Feedback</b>

	<b>Global Incorrect Feedback</b>
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	The correct answer is: $7x(x^4 + 7x + 4)$ .
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### Question 3c of 8 ( 3 Using the grouping method to factor one or more GCFs out of a polynomial 294960 )

**Maximum Attempts:** 1

**Question Type:** Text Fill In Blank

**Maximum Score:** 2

**Is Case Sensitive:** false

$5x(x^4+7x+4), (x^4+7x+4)5x, 5x*(x^4+7x+4), (x^4+7x+4)*5x,$   
 $(5x)(x^4+7x+4), (x^4+7x+4)(5x), (5x)*(x^4+7x+4), (x^4+7x+4)*(5x),$   
 $5x(1x^4+7x+4), (1x^4+7x+4)5x, 5x*(1x^4+7x+4), (1x^4+7x+4)*5x,$   
 $(5x)(1x^4+7x+4), (1x^4+7x+4)(5x), (5x)*(1x^4+7x+4), (1x^4+7x+4)*(5x),$   
 $5x^1(x^4+7x^1+4), (x^4+7x^1+4)5x^1, 5x^1*(x^4+7x^1+4),$   
 $(x^4+7x^1+4)*5x^1, (5x^1)(x^4+7x^1+4), (x^4+7x^1+4)(5x^1),$   
 $(5x^1)*(x^4+7x^1+4), (x^4+7x^1+4)*(5x^1), 5x^1(1x^4+7x^1+4),$   
 $(1x^4+7x^1+4)5x^1, 5x^1*(1x^4+7x^1+4), (1x^4+7x^1+4)*5x^1,$   
 $(5x^1)(1x^4+7x^1+4), (1x^4+7x^1+4)(5x^1), (5x^1)*(1x^4+7x^1+4),$   
 $(1x^4+7x^1+4)*(5x^1)$

**Correct Answer:**

**Question:** Use the grouping method to factor the polynomial in the box completely. Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ . Write each factor as a polynomial in descending order.

$$5x^5 + 35x^2 + 20x$$

Attempt	Incorrect Feedback
1st	
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<hr/>	
Correct Feedback	
<hr/>	
Global Incorrect Feedback	
	The correct answer is: $5x(x^4 + 7x + 4)$ .

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### Question 4a of 8 ( 3 Using the grouping method to factor one or more GCFs out of a polynomial 91019 )

**Maximum Attempts:** 1

**Question Type:** Text Fill In Blank

**Maximum Score:** 2

**Is Case Sensitive:** false

$3x(x^3+4x^2+9), (x^3+4x^2+9)3x, 3x*(x^3+4x^2+9), (x^3+4x^2+9)*3x,$   
 $(3x)(x^3+4x^2+9), (x^3+4x^2+9)(3x), (3x)*(x^3+4x^2+9),$   
 $(x^3+4x^2+9)*(3x), 3x(1x^3+4x^2+9), (1x^3+4x^2+9)3x,$   
 $3x*(1x^3+4x^2+9), (1x^3+4x^2+9)*3x, (3x)(1x^3+4x^2+9),$   
 $(1x^3+4x^2+9)(3x), (3x)*(1x^3+4x^2+9), (1x^3+4x^2+9)*(3x),$   
 $3x^1(x^3+4x^2+9), (x^3+4x^2+9)3x^1, 3x^1*(x^3+4x^2+9),$   
 $(x^3+4x^2+9)*3x^1, (3x^1)(x^3+4x^2+9), (x^3+4x^2+9)(3x^1),$   
 $(3x^1)*(x^3+4x^2+9), (x^3+4x^2+9)*(3x^1), 3x^1(1x^3+4x^2+9),$   
 $(1x^3+4x^2+9)3x^1, 3x^1*(1x^3+4x^2+9), (1x^3+4x^2+9)*3x^1,$   
 $(3x^1)(1x^3+4x^2+9), (1x^3+4x^2+9)(3x^1), (3x^1)*(1x^3+4x^2+9),$   
 $(1x^3+4x^2+9)*(3x^1)$

**Correct Answer:**

**Question:** Use the grouping method to factor the polynomial in the box completely. Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ . Write each factor as a polynomial in descending order.

$$3x^4 + 12x^3 + 27x$$

Attempt	Incorrect Feedback
1st	
<hr/>	
<hr/>	
Correct Feedback	
<hr/>	

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

## Question 4b of 8 ( 3 Using the grouping method to factor one or more GCFs out of a polynomial 294961 )

**Maximum Attempts:**

1

**Question Type:**

Text Fill In Blank

**Maximum Score:**

2

**Is Case Sensitive:**

false

**Correct Answer:**

$5x(x^3+4x^2+9), (x^3+4x^2+9)5x, 5x*(x^3+4x^2+9), (x^3+4x^2+9)*5x,$   
 $(5x)(x^3+4x^2+9), (x^3+4x^2+9)(5x), (5x)*(x^3+4x^2+9),$   
 $(x^3+4x^2+9)*(5x), 5x(1x^3+4x^2+9), (1x^3+4x^2+9)5x,$   
 $5x*(1x^3+4x^2+9), (1x^3+4x^2+9)*5x, (5x)(1x^3+4x^2+9),$   
 $(1x^3+4x^2+9)(5x), (5x)*(1x^3+4x^2+9), (1x^3+4x^2+9)*(5x),$   
 $5x^1(x^3+4x^2+9), (x^3+4x^2+9)5x^1, 5x^1*(x^3+4x^2+9),$   
 $(x^3+4x^2+9)*5x^1, (5x^1)(x^3+4x^2+9), (x^3+4x^2+9)(5x^1),$   
 $(5x^1)*(x^3+4x^2+9), (x^3+4x^2+9)*(5x^1), 5x^1(1x^3+4x^2+9),$   
 $(1x^3+4x^2+9)5x^1, 5x^1*(1x^3+4x^2+9), (1x^3+4x^2+9)*5x^1,$   
 $(5x^1)(1x^3+4x^2+9), (1x^3+4x^2+9)(5x^1), (5x^1)*(1x^3+4x^2+9),$   
 $(1x^3+4x^2+9)*(5x^1)$

**Question:**

Use the grouping method to factor the polynomial in the box completely. Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ . Write each factor as a polynomial in descending order.

$$5x^4 + 20x^3 + 45x$$

Attempt	Incorrect Feedback
1st	

  

	Correct Feedback

  

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

## Question 4c of 8 ( 3 Using the grouping method to factor one or more GCFs out of a polynomial 294962 )

**Maximum Attempts:**

1

**Question Type:**

Text Fill In Blank

**Maximum Score:**

2

**Is Case Sensitive:**

false

**Correct Answer:**

$2x(x^3+4x^2+9), (x^3+4x^2+9)2x, 2x*(x^3+4x^2+9), (x^3+4x^2+9)*2x,$   
 $(2x)(x^3+4x^2+9), (x^3+4x^2+9)(2x), (2x)*(x^3+4x^2+9),$   
 $(x^3+4x^2+9)*(2x), 2x(1x^3+4x^2+9), (1x^3+4x^2+9)2x,$   
 $2x*(1x^3+4x^2+9), (1x^3+4x^2+9)*2x, (2x)(1x^3+4x^2+9),$   
 $(1x^3+4x^2+9)(2x), (2x)*(1x^3+4x^2+9), (1x^3+4x^2+9)*(2x),$   
 $2x^1(x^3+4x^2+9), (x^3+4x^2+9)2x^1, 2x^1*(x^3+4x^2+9),$   
 $(x^3+4x^2+9)*2x^1, (2x^1)(x^3+4x^2+9), (x^3+4x^2+9)(2x^1),$   
 $(2x^1)*(x^3+4x^2+9), (x^3+4x^2+9)*(2x^1), 2x^1(1x^3+4x^2+9),$   
 $(1x^3+4x^2+9)2x^1, 2x^1*(1x^3+4x^2+9), (1x^3+4x^2+9)*2x^1,$   
 $(2x^1)(1x^3+4x^2+9), (1x^3+4x^2+9)(2x^1), (2x^1)*(1x^3+4x^2+9),$   
 $(1x^3+4x^2+9)*(2x^1)$

**Question:**

Use the grouping method to factor the polynomial in the box completely. Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ . Write each factor as a polynomial in descending order.

$$2x^4 + 8x^3 + 18x$$

Attempt	Incorrect Feedback
1st	

  

	Correct Feedback

	<b>Global Incorrect Feedback</b>
	The correct answer is: $2x(x^3 + 4x^2 + 9)$ .

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**Question 5a of 8** ( 3 Using the grouping method to factor one or more GCFs out of a polynomial 91020 )**Maximum Attempts:**

1

**Question Type:**

Text Fill In Blank

**Maximum Score:**

2

**Is Case Sensitive:**

false

**Correct Answer:**

$4x^4(x^3+8x+6), (x^3+8x+6)4x^4, 4x^4*(x^3+8x+6), (x^3+8x+6)*4x^4,$   
 $(4x^4)(x^3+8x+6), (x^3+8x+6)(4x^4), (4x^4)*(x^3+8x+6),$   
 $(x^3+8x+6)*(4x^4), 4x^4(1x^3+8x+6), (1x^3+8x+6)4x^4,$   
 $4x^4*(1x^3+8x+6), (1x^3+8x+6)*4x^4, (4x^4)(1x^3+8x+6),$   
 $(1x^3+8x+6)(4x^4), (4x^4)*(1x^3+8x+6), (1x^3+8x+6)*(4x^4),$   
 $4x^4(x^3+8x^1+6), (x^3+8x^1+6)4x^4, 4x^4*(x^3+8x^1+6),$   
 $(x^3+8x^1+6)*4x^4, (4x^4)(x^3+8x^1+6), (x^3+8x^1+6)(4x^4),$   
 $(4x^4)*(x^3+8x^1+6), (x^3+8x^1+6)*(4x^4), 4x^4(1x^3+8x^1+6),$   
 $(1x^3+8x^1+6)4x^4, 4x^4*(1x^3+8x^1+6), (1x^3+8x^1+6)*4x^4,$   
 $(4x^4)(1x^3+8x^1+6), (1x^3+8x^1+6)(4x^4), (4x^4)*(1x^3+8x^1+6),$   
 $(1x^3+8x^1+6)*(4x^4)$

**Question:**

Use the grouping method to factor the polynomial in the box completely. Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ . Write each factor as a polynomial in descending order.

$$4x^7 + 32x^5 + 24x^4$$

Attempt	Incorrect Feedback
1st	

  

	Correct Feedback

  

	Global Incorrect Feedback
	The correct answer is: $4x^4(x^3 + 8x + 6)$ .

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**Question 5b of 8** ( 3 Using the grouping method to factor one or more GCFs out of a polynomial 294963 )**Maximum Attempts:**

1

**Question Type:**

Text Fill In Blank

**Maximum Score:**

2

**Is Case Sensitive:**

false

**Correct Answer:**

$5x^4(x^3+8x+6), (x^3+8x+6)5x^4, 5x^4*(x^3+8x+6), (x^3+8x+6)*5x^4,$   
 $(5x^4)(x^3+8x+6), (x^3+8x+6)(5x^4), (5x^4)*(x^3+8x+6),$   
 $(x^3+8x+6)*(5x^4), 5x^4(1x^3+8x+6), (1x^3+8x+6)5x^4,$   
 $5x^4*(1x^3+8x+6), (1x^3+8x+6)*5x^4, (5x^4)(1x^3+8x+6),$   
 $(1x^3+8x+6)(5x^4), (5x^4)*(1x^3+8x+6), (1x^3+8x+6)*(5x^4),$   
 $5x^4(x^3+8x^1+6), (x^3+8x^1+6)5x^4, 5x^4*(x^3+8x^1+6),$   
 $(x^3+8x^1+6)*5x^4, (5x^4)(x^3+8x^1+6), (x^3+8x^1+6)(5x^4),$   
 $(5x^4)*(x^3+8x^1+6), (x^3+8x^1+6)*(5x^4), 5x^4(1x^3+8x^1+6),$   
 $(1x^3+8x^1+6)5x^4, 5x^4*(1x^3+8x^1+6), (1x^3+8x^1+6)*5x^4,$   
 $(5x^4)(1x^3+8x^1+6), (1x^3+8x^1+6)(5x^4), (5x^4)*(1x^3+8x^1+6),$   
 $(1x^3+8x^1+6)*(5x^4)$

**Question:**

Use the grouping method to factor the polynomial in the box completely. Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ . Write each factor as a polynomial in descending order.

$$5x^7 + 40x^5 + 30x^4$$

Attempt	Incorrect Feedback
1st	

  

	Correct Feedback

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

### Question 5c of 8 ( 3 Using the grouping method to factor one or more GCFs out of a polynomial 294964 )

**Maximum Attempts:** 1

**Question Type:** Text Fill In Blank

**Maximum Score:** 2

**Is Case Sensitive:** false

**Correct Answer:**  $6x^4(x^3+8x+6), (x^3+8x+6)6x^4, 6x^4*(x^3+8x+6), (x^3+8x+6)*6x^4,$   
 $(6x^4)(x^3+8x+6), (x^3+8x+6)(6x^4), (6x^4)*(x^3+8x+6),$   
 $(x^3+8x+6)*(6x^4), 6x^4(1x^3+8x+6), (1x^3+8x+6)6x^4,$   
 $6x^4*(1x^3+8x+6), (1x^3+8x+6)*6x^4, (6x^4)(1x^3+8x+6),$   
 $(1x^3+8x+6)(6x^4), (6x^4)*(1x^3+8x+6), (1x^3+8x+6)*(6x^4),$   
 $6x^4(x^3+8x^1+6), (x^3+8x^1+6)6x^4, 6x^4*(x^3+8x^1+6),$   
 $(x^3+8x^1+6)*6x^4, (6x^4)(x^3+8x^1+6), (x^3+8x^1+6)(6x^4),$   
 $(6x^4)*(x^3+8x^1+6), (x^3+8x^1+6)*(6x^4), 6x^4(1x^3+8x^1+6),$   
 $(1x^3+8x^1+6)6x^4, 6x^4*(1x^3+8x^1+6), (1x^3+8x^1+6)*6x^4,$   
 $(6x^4)(1x^3+8x^1+6), (1x^3+8x^1+6)(6x^4), (6x^4)*(1x^3+8x^1+6),$   
 $(1x^3+8x^1+6)*(6x^4)$

**Question:** Use the grouping method to factor the polynomial in the box completely. Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ . Write each factor as a polynomial in descending order.

$$6x^7 + 48x^5 + 36x^4$$

Attempt	Incorrect Feedback
1st	

  

	Correct Feedback

  

	Global Incorrect Feedback
	The correct answer is: $6x^4(x^3 + 8x + 6)$ .

### Question 6a of 8 ( 3 Using the grouping method to factor one or more GCFs out of a polynomial 91021 )

**Maximum Attempts:** 1

**Question Type:** Text Fill In Blank

**Maximum Score:** 2

**Is Case Sensitive:** false

**Correct Answer:**  $2x^4(3x^5+7x+5), (3x^5+7x+5)2x^4, 2x^4*(3x^5+7x+5),$   
 $(3x^5+7x+5)*2x^4, (2x^4)(3x^5+7x+5), (3x^5+7x+5)(2x^4),$   
 $(2x^4)*(3x^5+7x+5), (3x^5+7x+5)*(2x^4), 2x^4(3x^5+7x^1+5),$   
 $(3x^5+7x^1+5)2x^4, 2x^4*(3x^5+7x^1+5), (3x^5+7x^1+5)*2x^4,$   
 $(2x^4)(3x^5+7x^1+5), (3x^5+7x^1+5)(2x^4), (2x^4)*(3x^5+7x^1+5),$   
 $(3x^5+7x^1+5)*(2x^4)$

**Question:** Use the grouping method to factor the polynomial in the box completely. Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ . Write each factor as a polynomial in descending order.

$$6x^9 + 14x^5 + 10x^4$$

Attempt	Incorrect Feedback
1st	

  

	Correct Feedback

  

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

## Question 6b of 8 ( 3 Using the grouping method to factor one or more GCFs out of a polynomial 294965 )

**Maximum Attempts:** 1

**Question Type:** Text Fill In Blank

**Maximum Score:** 2

**Is Case Sensitive:** false

**Correct Answer:**  
 $3x^4(3x^5+7x+5), (3x^5+7x+5)3x^4, 3x^4*(3x^5+7x+5),$   
 $(3x^5+7x+5)*3x^4, (3x^4)(3x^5+7x+5), (3x^5+7x+5)(3x^4),$   
 $(3x^4)*(3x^5+7x+5), (3x^5+7x+5)*(3x^4), 3x^4(3x^5+7x^1+5),$   
 $(3x^5+7x^1+5)3x^4, 3x^4*(3x^5+7x^1+5), (3x^5+7x^1+5)*3x^4,$   
 $(3x^4)(3x^5+7x^1+5), (3x^5+7x^1+5)(3x^4), (3x^4)*(3x^5+7x^1+5),$   
 $(3x^5+7x^1+5)*(3x^4)$

**Question:** Use the grouping method to factor the polynomial in the box completely. Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ . Write each factor as a polynomial in descending order.

$$9x^9 + 21x^5 + 15x^4$$

Attempt	Incorrect Feedback
1st	
	<b>Correct Feedback</b>
	<b>Global Incorrect Feedback</b>
	The correct answer is: $3x^4(3x^5 + 7x + 5)$ .

## Question 6c of 8 ( 3 Using the grouping method to factor one or more GCFs out of a polynomial 294966 )

**Maximum Attempts:** 1

**Question Type:** Text Fill In Blank

**Maximum Score:** 2

**Is Case Sensitive:** false

**Correct Answer:**  
 $4x^4(4x^5+7x+5), (4x^5+7x+5)4x^4, 4x^4*(4x^5+7x+5),$   
 $(4x^5+7x+5)*4x^4, (4x^4)(4x^5+7x+5), (4x^5+7x+5)(4x^4),$   
 $(4x^4)*(4x^5+7x+5), (4x^5+7x+5)*(4x^4), 4x^4(4x^5+7x^1+5),$   
 $(4x^5+7x^1+5)4x^4, 4x^4*(4x^5+7x^1+5), (4x^5+7x^1+5)*4x^4,$   
 $(4x^4)(4x^5+7x^1+5), (4x^5+7x^1+5)(4x^4), (4x^4)*(4x^5+7x^1+5),$   
 $(4x^5+7x^1+5)*(4x^4)$

**Question:** Use the grouping method to factor the polynomial in the box completely. Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ . Write each factor as a polynomial in descending order.

$$16x^9 + 28x^5 + 20x^4$$

Attempt	Incorrect Feedback
1st	
	<b>Correct Feedback</b>
	<b>Global Incorrect Feedback</b>
	The correct answer is: $4x^4(4x^5 + 7x + 5)$ .

## Question 7a of 8 ( 3 Using the grouping method to factor one or more GCFs out of a polynomial 91022 )

**Maximum Attempts:** 1

**Question Type:** Text Fill In Blank

**Maximum Score:** 2

**Is Case Sensitive:** false

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

**Question:** Use the grouping method to factor the polynomial below completely. Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ . Write each factor as a polynomial in descending order.

$$x^3 + 2x^2 + 4x + 8$$

Attempt	Incorrect Feedback
1st	
	<b>Correct Feedback</b>
	<b>Global Incorrect Feedback</b>
	The correct answer is: $(x^2 + 4)(x + 2)$ .

---

## Question 7b of 8 ( 3 Using the grouping method to factor one or more GCFs out of a polynomial 294967 )

**Maximum Attempts:** 1

**Question Type:** Text Fill In Blank

**Maximum Score:** 2

**Is Case Sensitive:** false

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

**Question:** Use the grouping method to factor the polynomial below completely. Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ . Write each factor as a polynomial in descending order.

$$x^3 + 2x^2 + 3x + 6$$

Attempt	Incorrect Feedback
1st	
	<b>Correct Feedback</b>
	<b>Global Incorrect Feedback</b>
	The correct answer is: $(x^2 + 3)(x + 2)$ .

### Question 7c of 8 ( 3 Using the grouping method to factor one or more GCFs out of a polynomial 294968 )

**Maximum Attempts:** 1

**Question Type:** Text Fill In Blank

**Maximum Score:** 2

**Is Case Sensitive:** false

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

**Question:** Use the grouping method to factor the polynomial below completely. Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ . Write each factor as a polynomial in descending order.

$$x^3 + 2x^2 + 5x + 10$$

Attempt	Incorrect Feedback
1st	
	<b>Correct Feedback</b>
	<b>Global Incorrect Feedback</b>
	The correct answer is: $(x^2 + 5)(x + 2)$ .

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### Question 8a of 8 ( 3 Using the grouping method to factor one or more GCFs out of a polynomial 91023 )

**Maximum Attempts:** 1

**Question Type:** Text Fill In Blank

**Maximum Score:** 2

**Is Case Sensitive:** false

**Correct Answer:**  
( $2x^2+7$ )( $x+8$ ), ( $x+8$ )( $2x^2+7$ ), ( $x+8$ )\*( $2x^2+7$ ), ( $2x^2+7$ )\*( $x+8$ ),  
( $1x+8$ )( $2x^2+7$ ), ( $2x^2+7$ )( $1x+8$ ), ( $1x+8$ )\*( $2x^2+7$ ), ( $2x^2+7$ )\*( $1x+8$ ),  
( $x^1+8$ )( $2x^2+7$ ), ( $2x^2+7$ )( $x^1+8$ ), ( $x^1+8$ )\*( $2x^2+7$ ), ( $2x^2+7$ )\*( $x^1+8$ ),  
( $1x^1+8$ )( $2x^2+7$ ), ( $2x^2+7$ )( $1x^1+8$ ), ( $1x^1+8$ )\*( $2x^2+7$ ),  
( $2x^2+7$ )\*( $1x^1+8$ )

**Question:** Use the grouping method to factor the polynomial below completely. Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ . Write each factor as a polynomial in descending order.

$$2x^3 + 16x^2 + 7x + 56$$

Attempt	Incorrect Feedback
1st	
	<b>Correct Feedback</b>
	<b>Global Incorrect Feedback</b>
	The correct answer is: $(2x^2 + 7)(x + 8)$ .

## Question 8b of 8 ( 3 Using the grouping method to factor one or more GCFs out of a polynomial 294969 )

**Maximum Attempts:** 1

**Question Type:** Text Fill In Blank

**Maximum Score:** 2

**Is Case Sensitive:** false

**Correct Answer:**  
 $(2x^2+7)(x+6)$ ,  $(x+6)(2x^2+7)$ ,  $(x+6)*(2x^2+7)$ ,  $(2x^2+7)*(x+6)$ ,  
 $(1x+6)(2x^2+7)$ ,  $(2x^2+7)(1x+6)$ ,  $(1x+6)*(2x^2+7)$ ,  $(2x^2+7)*(1x+6)$ ,  
 $(x^1+6)(2x^2+7)$ ,  $(2x^2+7)(x^1+6)$ ,  $(x^1+6)*(2x^2+7)$ ,  $(2x^2+7)*(x^1+6)$ ,  
 $(1x^1+6)(2x^2+7)$ ,  $(2x^2+7)(1x^1+6)$ ,  $(1x^1+6)*(2x^2+7)$ ,  
 $(2x^2+7)*(1x^1+6)$

**Question:** Use the grouping method to factor the polynomial below completely. Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ . Write each factor as a polynomial in descending order.

$$2x^3 + 12x^2 + 7x + 42$$

Attempt	Incorrect Feedback
1st	
	<b>Correct Feedback</b>
	<b>Global Incorrect Feedback</b>
	The correct answer is: $(2x^2 + 7)(x + 6)$ .

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## Question 8c of 8 ( 3 Using the grouping method to factor one or more GCFs out of a polynomial 294970 )

**Maximum Attempts:** 1

**Question Type:** Text Fill In Blank

**Maximum Score:** 2

**Is Case Sensitive:** false

**Correct Answer:**  
 $(2x^2+5)(x+6)$ ,  $(x+6)(2x^2+5)$ ,  $(x+6)*(2x^2+5)$ ,  $(2x^2+5)*(x+6)$ ,  
 $(1x+6)(2x^2+5)$ ,  $(2x^2+5)(1x+6)$ ,  $(1x+6)*(2x^2+5)$ ,  $(2x^2+5)*(1x+6)$ ,  
 $(x^1+6)(2x^2+5)$ ,  $(2x^2+5)(x^1+6)$ ,  $(x^1+6)*(2x^2+5)$ ,  $(2x^2+5)*(x^1+6)$ ,  
 $(1x^1+6)(2x^2+5)$ ,  $(2x^2+5)(1x^1+6)$ ,  $(1x^1+6)*(2x^2+5)$ ,  
 $(2x^2+5)*(1x^1+6)$

**Question:** Use the grouping method to factor the polynomial below completely. Use the caret symbol ( ^ ) to write exponents; for example, enter  $x^2$  as  $x^2$ . Write each factor as a polynomial in descending order.

$$2x^3 + 12x^2 + 5x + 30$$

Attempt	Incorrect Feedback
1st	
	<b>Correct Feedback</b>
	<b>Global Incorrect Feedback</b>
	The correct answer is: $(2x^2 + 5)(x + 6)$ .