Definition:

What is a GCF?

Find the GCF between 14 and 63. 14 63 Factor out the GCF: (2x + 12)Factor out the GCF: $(3x^4 + 12x^3 - 9x^2 + x + 24)$ Factor out the GCF: $(x^4y + x^3y^2 + x^2y^3 + xy^4)$

Factoring Out the GCF Practice

Factor out the GCF for each of the problems below.

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10x ³ -3x	$9x^{2} + x$
GCF:	GCF:
Factored Expression:	Factored Expression:
$14x^3 + 7x^2 + 7x$	$4x^3 + 6x^2 + 10x$
GCF:	GCF:
Factored Expression:	Factored Expression:
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$18x^2 + 36x + 3$	$3x^2y - 3x^2y^6$
GCF:	GCF:
Factored Expression:	Factored Expression:
$-15x^{2} + 7x$	3x²y - 9xy⁴
GCF:	GCF:
Factored Expression:	Factored Expression:
$40x^3 + 5x^2 + 15x$	$14x^{3}y^{2} - 21x^{2}y^{3}$
GCF:	GCF:
Factored Expression:	Factored Expression:

9y ² + 5y	$2x^2 - 4x + 8y$
GCF:	GCF:
Factored Expression:	Factored Expression:
$x^3 + xy + 5x^2$	$2x^2y + 4x^4y + 6x^6y$
GCF:	<i>GC</i> F:
Factored Expression:	Factored Expression:

Mrs. Talley's best friend Lillian decided to factor out the GCF of

 $16x^3 - 12x + 6$

She got $6x(10x^2 - 2x + 1)$ as her answer. Is her answer correct? If yes, explain how you know it is correct. If her answer is wrong explain how she should have done the problem.