

KEY

1. Simplify $(6x^3 - 7x^2 + 2) + (2x^3 - 9x^2 + 32)$ $8x^3 - 16x^2 + 34$	2. Simplify $(3a^3 + 8a^2 + 10a) - (10a^3 + a^2 - 8a)$ $-7a^3 + 7a^2 + 18a$
3. Simplify $(10x^2 - 8) + (6x^2 + 4x - 2)$ $16x^2 + 4x - 10$	4. Simplify $(x^2 + 6x - 15) - (8x^2 - 7x - 21)$ $-7x^2 + 13x + 6$
5. Find the GCF $10x^5 + 25x^4 + 5x^3$ $5x^3$	6. Find the GCF $36x^5y^4 + 18x^4y^3 - 42x^3y^3$ $6x^3y^3$
7. Factor out the GCF $8x^5 + 20x^4 + 18x^3$ $2x^3(4x^2 + 10x + 9)$	8. Factor out the GCF $6x^5 + 2x^4 + 12x^3$ $2x^3(3x^2 + x + 6)$
9. Simplify $8x^3(x^2 + 10)$ $8x^5 + 80x^3$	10. Simplify $-5x^3(x^6 - 9)$ $-5x^9 + 45x^3$

Operations with Polynomials—REVIEW B

11. Simplify

$$(6x + 7)(x + 4)$$

$$6x^2 + 31x + 28$$

12. Simplify

$$(9x + 1)(7x - 4)$$

$$63x^2 - 29x - 4$$

13. Simplify

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

	x	3
$2x^2$	$2x^3$	$6x^2$
$-7x$	$-7x^2$	$-21x$
7	$7x$	21

$$2x^3 - x^2 - 14x + 21$$

14. Simplify

$$(5x^2 - 1x + 11)(6x + 1)$$

	$6x$	1
$5x^2$	$30x^3$	$5x^2$
$-x$	$-6x^2$	$-x$
11	$66x$	11

$$30x^3 - x^2 + 65x + 11$$