

Operations with Polynomials—REVIEW

Name: KHEY

<p>1. Simplify</p> $(4x^3 - 6x^2 + 9) + (2x^3 - 3x^2 + 71)$ $6x^3 - 9x^2 + 80$	<p>2. Simplify</p> $(3a^3 + 9a^2 + 6a) - (2a^3 + a^2 - 4a)$ $a^3 + 8a^2 + 2a$
<p>3. Simplify</p> $(3x^2 - 4) + (4x^2 + 2x - 1)$ $7x^2 + 2x - 5$	<p>4. Simplify</p> $(x^2 + 8x - 13) - (4x^2 - 5x - 8)$ $-3x^2 + 13x - 5$
<p>5. Find the GCF</p> $6x^5 + 24x^4 + 8x^3$ $2x^3$	<p>6. Find the GCF</p> $12x^5y^4 + 20x^4y^3 - 8x^3y^3$ $4x^3y^3$
<p>7. Factor out the GCF</p> $4x^5 + 20x^4 + 8x^3$ $4x^3(x^2 + 5x + 2)$	<p>8. Factor out the GCF</p> $6x^5 + 24x^4 + 8x^3$ $2x^3(3x^2 + 12x + 4)$
<p>9. Simplify</p> $4x(x^2 + 6)$ $4x^3 + 24x$	<p>10. Simplify</p> $-2x^3(x^2 + 3x - 4)$ $-2x^5 - 6x^4 + 8x^3$

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11. Simplify

$$(3x + 7)(x + 5)$$

$$3x^2 + 22x + 35$$

12. Simplify

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

$$8x^2 - 2x - 3$$

13. Simplify

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

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

14. Simplify

$$(2x^2 - 9x + 11)(2x + 1)$$

$$4x^3 - 16x^2 + 13x + 11$$