

Operations with Polynomials - Practice Worksheet

Name: _____ Date: _____

Instructions: Perform the indicated operation and simplify your answer completely. Show all steps.

1. $(3x + 5) + (2x + 4)$

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

.....

3. $(6x + 9) - (2x + 3)$

.....

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

.....

5. $3x(2x + 5)$

.....

6. $(x + 4)(x + 3)$

.....

7. $(2x - 1)(3x + 5)$

.....

8. $(x + 2)(x^2 - 2x + 4)$

.....

9. $(6x^2 + 9x) / 3x$

.....

10. $(x^2 + 5x + 6) / (x + 2)$

.....

11. $(2x^3 - 3x^2 + x - 5) / (x - 1)$

.....

12. $(x^2 - 9) / (x - 3)$

.....

Answer Key

1. $5x + 9$

2. $5x^2 + x + 7$

3. $4x + 6$

4. $3x^2 - 4x + 5$

5. $6x^2 + 15x$

6. $x^2 + 7x + 12$

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

8. $x^3 + 8$

9. $2x + 3$

10. $x + 3$

11. $2x^2 - x + 0$ remainder -5 , i.e. $2x^2 - x - 5/(x-1)$

12. $x + 3$