

Algebra One - CP2

Chapter 9(4-8)

Review Activity

Name: _____ KEY

Partner #1: _____ Date: _____

Partner #2: _____ Period: _____

All simplified answers (no double signs) should be written on the answer lines provided. Write all answers in descending order according to x. Make sure you follow the directions for each section.

Find the degree. [9-4]

- 1) $33x^7y^2 + 4x^2y^2 - 11x^9y^3 + 2xy^5 - 8$ _____ 12
- 2) $5x^8y^3 + 8xy^{13} - 2xy^2 - 8$ _____ 14
- 3) $2x^3y^4 + 4xy - 3$ _____ 7
- 4) $9x^5 + 6x^9 - 11x^4 + 2x$ _____ 9
- 5) 7 _____ 0

Write in descending order according to x. [9-4]

- 6) $2x^3y^4 - 7x^7y^2 + 4xy - 3$ _____ $-7x^7y^2 + 2x^3y^4 + 4xy - 3$
- 7) $8x^6y^8 + 5x^8y^3 - 2xy^2 - 8$ _____ $5x^8y^3 + 8x^6y^8 - 2xy^2 - 8$
- 8) $33x^7y^2 + 4x^2y^2 - 11x^9y^3 + 2xy^5 - 17$ _____ $-11x^9y^3 + 33x^7y^2 + 4x^2y^2 + 2xy^5 - 17$

Name the polynomial given. [9-4]

- 9) $5 + x - 4x^2$ _____ Trinomial
- 10) $x^5 + 3x^9y^2$ _____ Binomial
- 11) $xy + yz + 3z - 7$ _____ Polynomial
- 12) $x^2y^5z^4$ _____ Monomial

Give an example of the following. [9-4]

- 13) Monomial _____ Answers will vary
- 14) Trinomial _____ Answers will vary
- 15) Constant _____ Answers will vary

Simplify. [9-5]

- 16) $(9x^3 - 3x^2 - 6x + 4) - (4x^2 + 6x + 4)$ _____ $9x^3 - 7x^2 - 12x$

Simplify. Show ONE work step. [9-6]

- 17) $\frac{1}{3}x^6y(9x^5 - 24x^2y^3 + 6x^4y)$ _____ $3x^{11}y + 2x^{10}y^2 - 8x^8y^4$

Solve and check. Each side must be simplified completely before solving. [9-6]

18) $3(x + 7) - 2(x + 8) = 2x + 27$

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Simplify. Show TWO work steps. Rewrite if necessary. [9-7, 9-8]

19) $(x + 8y)(x - 5y)$

$x^2 + 3xy - 40y^2$

21) $(12x - 7)^2$

$144x^2 - 168x + 49$

22) $(13x + 2)(13x - 2)$

$169x^2 - 4$

Simplify. [9-7]

20) $(4x^2 + 9x - 2)(x - 5)$

$4x^3 - 11x^2 - 47x + 10$