

8th Grade Assignment Sheet ----- POD B

Date 5-8-12

Science: Shari Hudgeons Book: Yes No

Egg Drop Lab

Math: Katie Johnson Book: Yes No

- Make-up Test, Ch. 6
- W.S. 7-4 ✓ 7-5
(Review)

Communications: Sandi Armbruster Book: Yes No

Quilt Block
Letter
Paragraph
Apostrophe wkst

see me

Social Studies: Larry Criddle Book: Yes No

see Attached

7-4**Study Guide and Intervention**

Johnson

PP 1 of 2

Adding and Subtracting Polynomials

Add Polynomials To add polynomials, you can group like terms horizontally or write them in column form, aligning like terms vertically. **Like terms** are monomial terms that are either identical or differ only in their coefficients, such as $3p$ and $-5p$ or $2x^2y$ and $8x^2y$.

Example 1

Find $(2x^2 + x - 8) + (3x - 4x^2 + 2)$.

Horizontal Method

Group like terms.

$$\begin{aligned} (2x^2 + x - 8) + (3x - 4x^2 + 2) \\ = [(2x^2 + (-4x^2)) + (x + 3x) + [(-8) + 2]] \\ = -2x^2 + 4x - 6. \end{aligned}$$

The sum is $-2x^2 + 4x - 6$.**Example 2**

Find $(3x^2 + 5xy) + (xy + 2x^2)$.

Vertical Method

Align like terms in columns and add.

$$\begin{array}{r} 3x^2 + 5xy \\ (+) 2x^2 + xy \\ \hline 5x^2 + 6xy \end{array} \quad \text{Put the terms in descending order.}$$

The sum is $5x^2 + 6xy$.**Exercises**

Find each sum.

- $(4a - 5) + (3a + 6)$
- $(6x + 9) + (4x^2 - 7)$
- $(6xy + 2y + 6x) + (4xy - x)$
- $(x^2 + y^2) + (-x^2 + y^2)$
- $(3p^2 - 2p + 3) + (p^2 - 7p + 7)$
- $(2x^2 + 5xy + 4y^2) + (-xy - 6x^2 + 2y^2)$
- $(5p + 2q) + (2p^2 - 8q + 1)$
- $(4x^2 - x + 4) + (5x + 2x^2 + 2)$
- $(6x^2 + 3x) + (x^2 - 4x - 3)$
- $(x^2 + 2xy + y^2) + (x^2 - xy - 2y^2)$
- $(2a - 4b - c) + (-2a - b - 4c)$
- $(6xy^2 + 4xy) + (2xy - 10xy^2 + y^2)$
- $(2p - 5q) + (3p + 6q) + (p - q)$
- $(2x^2 - 6) + (5x^2 + 2) + (-x^2 - 7)$
- $(3z^2 + 5z) + (z^2 + 2z) + (z - 4)$
- $(8x^2 + 4x + 3y^2 + y) + (6x^2 - x + 4y)$

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Study Guide and Intervention

Johnson

Multiplying a Polynomial by a Monomial

pp. 206-2

Product of Monomial and Polynomial The Distributive Property can be used to multiply a polynomial by a monomial. You can multiply horizontally or vertically. Sometimes multiplying results in like terms. The products can be simplified by combining like terms.

Example 1 Find $-3x^2(4x^2 + 6x - 8)$.

Horizontal Method

$$\begin{aligned} & -3x^2(4x^2 + 6x - 8) \\ &= -3x^2(4x^2) + (-3x^2)(6x) - (-3x^2)(8) \\ &= -12x^4 + (-18x^3) - (-24x^2) \\ &= -12x^4 - 18x^3 + 24x^2 \end{aligned}$$

Vertical Method

$$\begin{array}{r} 4x^2 + 6x - 8 \\ (\times) \quad \quad \quad -3x^2 \\ \hline -12x^4 - 18x^3 + 24x^2 \end{array}$$

The product is $-12x^4 - 18x^3 + 24x^2$.

Example 2 Simplify $-2(4x^2 + 5x) - x(x^2 + 6x)$.

$$\begin{aligned} & -2(4x^2 + 5x) - x(x^2 + 6x) \\ &= -2(4x^2) + (-2)(5x) + (-x)(x^2) + (-x)(6x) \\ &= -8x^2 + (-10x) + (-x^3) + (-6x^2) \\ &= (-x^3) + [-8x^2 + (-6x^2)] + (-10x) \\ &= -x^3 - 14x^2 - 10x \end{aligned}$$

Exercises

Find each product.

- | | | |
|------------------------|--------------------------|-----------------------------|
| 1. $x(5x + x^2)$ | 2. $x(4x^2 + 3x + 2)$ | 3. $-2xy(2y + 4x^2)$ |
| 4. $-2g(g^2 - 2g + 2)$ | 5. $3x(x^4 + x^3 + x^2)$ | 6. $-4x(2x^3 - 2x + 3)$ |
| 7. $-4cx(10 + 3x)$ | 8. $3y(-4x - 6x^3 - 2y)$ | 9. $2x^2y^2(3xy + 2y + 5x)$ |

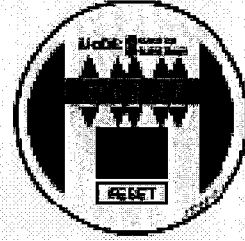
Simplify.

- | | |
|---|---|
| 10. $x(3x - 4) - 5x$ | 11. $-x(2x^2 - 4x) - 6x^2$ |
| 12. $6a(2a - b) + 2a(-4a + 5b)$ | 13. $4r(2r^2 - 3r + 5) + 6r(4r^2 + 2r + 8)$ |
| 14. $4n(3n^2 + n - 4) - n(3 - n)$ | 15. $2b(b^2 + 4b + 8) - 3b(3b^2 + 9b - 18)$ |
| 16. $-2z(4z^2 - 3z + 1) - z(3z^2 + 2z - 1)$ | 17. $2(4x^2 - 2x) - 3(-6x^2 + 4) + 2x(x - 1)$ |

Cribble

May 8, 2012

Grade Review Question Chapter 8
Video Yearbook



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May 8, 2012

8

Read Chapter 13
Write an essay (detailed at least one page)

Where the Red Fern
Grows.website

Where the Red Fern Grows
Chapter quiz

Where the Red Fern Grows12-1

CHAPTER 15 (T)
Questions 12-15

VIDEO YEARBOOK