

CHAPTER 4 REVIEW

4.1 - EXPONENTS

$$-5^2$$

$$(-5)^2$$

Evaluate x^3 if $x = -2$

4.2 - ADDING AND SUBTRACTING POLYNOMIALS

- MONOMIALS
- BINOMIALS
- TRINOMIALS
- COEFFICIENT
- LIKE TERMS
- DEGREE

Coefficient Degree

$$2y^3$$

Base

4.2 - ADDING AND SUBTRACTING POLYNOMIALS

Rules:

- Add like monomials
- Add only the coefficients
- Leave exponents alone

$$(3a^2 + 2ab - 2b^2 - 7) - (-a^2 - 5ab - 4b^2 - 2)$$

4.3 - MULTIPLYING POLYNOMIALS

Rules

- Add exponents
- Multiply only the coefficients

$$a^7 \cdot a^8$$

$$(-8x^5y^6)(7x^3y^9)$$

$$5^2 \cdot 5^8$$

4.4 - POWERS OF EXPONENTS

Rules

- Multiply exponents
- "Distribute" exponents

$$(a^5)^3$$

$$(-8x^5y^3)^2$$

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

4.5 – MULTIPLYING POLYNOMIALS BY MONOMIALS

Rules

- Distributive Property

$$6xy^3(5x^2 + 2xy + 7y)$$

4.5 – MULTIPLYING POLYNOMIALS BY MONOMIALS

Rules

- Distributive Property

$$6xy^3(5x^2 + 2xy + 7y)$$

4.6 – MULTIPLYING POLYNOMIALS

Rules

- Repeat distributive property

$$(2x - 3)(3x^2 - 4x - 2)$$

4.7 – TRANSFORMING FORMULAS

Rules

- Get chosen variable alone
- Know “restrictions”

Solve the formula for h . State any restrictions.

$$K = \frac{j}{h+m}$$

4.8 – RATE-TIME-DISTANCE PROBLEMS

Rules

- Motion in same direction
- Motion in opposite direction
- Round trip

	Rate	X	Time	=	Distance

4.9 – AREA PROBLEMS

Rules

- BIG SHAPE – SMALL SHAPE = BORDER (CHANGE OF AREA)



4.10 – PROBLEMS WITHOUT SOLUTIONS

Rules

- Not enough information
- Unrealistic result
- Contradictory facts