Math Makes Sense 9

Chapter 5: POLYNOMIALS

Key Words: Either now or as you work through this chapter, define, illustrate or give an example of each word or idea**: algebraic expression, polynomial, term, coefficient, degree, constant term, monomial, binomial, trinomial, like and unlike terms.**

Re-adjust your thinking: Working with Polynomials:

1. **Try to stop thinking about addition and subtraction. Instead, try to see it as combining positives and negatives (TERMS).**
2. **Think of the TERMS as LEGO blocks. Often the blocks get all mixed up when they are played with, so they need to be sorted out into similar groupings. When organizing or sorting TERMS, group similar blocks together, so you would:**
    a. **Collect all the double-button blocks together**
    b. **Collect all the quadruple-button blocks together**
    c. **Collect all the single-button blocks together**
    d. **Collect all the triple-button blocks together**
3. **When organizing the TERMS into groups remember that every TERM is born with a SIGN. You can move things around BUT BE SURE that every TERM keep the SIGN it was born with after it gets moved to a new location.**

First, take the Practice Test on Page 262. Score your test and give yourself a per cent.   _____ %

<mark>Topic: 5.1 Modelling Polynomials</mark>

Read and study pages: 210 – 213

Give special attention to: Examples 1, 2, & 3.

NB: When working through the assigned exercises and activities, you should check ALL your answers using the answer guide at the back of the book. Do **NOT** proceed to the next set of questions until you have corrected the section you are working on. I.e.: Do not wait to correct your answers till you have finished the whole page of assigned questions. Go back and **re-read** the notes and examples till you understand the concept when you are stuck or not getting something.

Basic Assignment: CHECK Q's: #'s 4 to 7

        APPLY Q's: #'s 8 to 16

        ASSESSMENT FOCUS: Q's: #'s 18 and 20

Challenge Assignment: Q's: #'s 1, 2, 3 back on page 213!

Topic 5.2: Like Terms and Unlike Terms

Read and study pages: 217 – 219.

Give special attention to: Examples 1, 2, 3, & 4.

Basic Assignment: CHECK Q's: 4, 5

        APPLY Q's:6 to 10. For #'s 11 to 15, choose half in each section.

        ASSESSMENT FOCUS: Q's: #'s 18a, 19a, b, c & d, 20a, b, d,

Challenge Assignment: Q's: #'s 21, 22

Topic 5.3: Adding Polynomials

Read and study pages: 225 - 228

Give special attention to: Examples 1, and 3, and especially #2

Basic Assignment: CHECK Q's: #'s 3 to 7, 14, 16, 17

APPLY Q's: Half of #'s 8 & 9, ALL of # 10, and 3 parts of # 11.

ASSESSMENT FOCUS: Q's: #'s 15

Challenge Assignment: Q's: the leftovers

Topic 5.4: Subtracting Polynomials

Read and study pages: 231 - 234

Give special attention to: Remember the "Cheat" --- Do NOT subtract, but change it to an addition! How, you say…?

"to subtract something" gets REFRAMED, or FLIP FLOPPED into an addition, so, "to subtract" means "to add the inverse"

Ie: 6 – 4   flip flops into: 6 + (-4)   either way, it = 2!

-7 – 5   flip flops into: -7 + (– 5)   either way, it = - 12!

Basic Assignment: CHECK Q's: #5, half the items

APPLY Q's: #'s 6, 7, 8, half the items each

ASSESSMENT FOCUS: Q's: #'s 12,13b&c, 16, 17

Challenge Assignment: Q's: # 18

Mid Unit Review, page 237

Do ALL questions from 1 to 8, and # 12. Then sample half the questions in #'s 9, 10 and 11.

Topic 5.5: Multiplying and Dividing a Polynomial by a Constant

Read and study pages: 238 & 239. Use one of the models to review the material from chapter 2. Use the key vocabulary on pg 51 as a guide.

Read and study pages: 241 - 245

Give special attention to: everything! Read and re-read.

Basic Assignment: CHECK Q's: 3 to 6

APPLY Q's: 7 to 17. For all multi-part questions, choose half of the items.

ASSESSMENT FOCUS: Q's: choose 3 of #'s 18 to 23.

Challenge Assignment: Q's: 24

Topic 5.6: Multiplying and Dividing a Polynomial by a Monomial

Read and study pages: 249 - 254

Give special attention to: everything – try to see this as dimensions: a length times a width, in other words, as AREA

Basic Assignment: CHECK Q's: 4 to 7

APPLY Q's: 9 to 16 – in multi-part questions, choose half

ASSESSMENT FOCUS: Q's: 19, 20 and 21-half each, 22

Challenge Assignment: Q's: 23, 24, and 25

Study Guide, page 258

Review thoroughly

Chapter Review, page 259-261

Do ALL questions #'s 1 to 29 on pages 259 to 261.

Lastly, take the Practice Test on Page 262. Score your test and give yourself a per cent. _____ **%.   Did you do better than you did last time?**