## MPM 1DI Unit 2 Polynomials

## Learning Goal

This unit we will use variables to represent unknowns and use algebraic expressions to communicate mathematical ideas.
This unit I will...

- I can model polynomial expressions diagrams, numbers, words.
- I can substitute into and evaluate algebraic expressions involving exponents.
- I can use the exponent rules for multiplying and dividing monomials involving one and two variables with positive exponents.
- I can use the exponent rule for the power of a power to simplify expressions involving one and two variables with positive exponents.
- I can demonstrate and explain why the multiplication, division and power rules for exponents work.
- I understand and can identify mathematical language as it relates to algebra and polynomials
- I can add and subtract polynomials with up to two variables.
- I can use the distributive property to multiply a polynomial by a monomial involving the same variable.
- I can expand and simplify polynomial expressions involving one variable.
- I can apply my knowledge of polynomials to solve multi-step problems and explain thinking.

| Day | Lesson | Assign. / Homework | Done <br> V |
| :---: | :---: | :---: | :---: |
| 1 | 3.3 Product and Quotient law for exponents | Page 126-127 \#1, 2abc(only evaluate b,c), 3, 4 (only evaluate $b, c, d$ ), <br> Worksheets: "Why are Babies Like Hinges?" <br> For Extra Practice: "Why was the Engineer..." |  |
| 2 | 3.3 Exponent Laws <br> part 2 - Power of a Power, power of a product | Page 127-129 \#6-10, 19, 20, note: 6 c error in text - answer should be 0.00000001 also for \#20 answer, $2 \overline{\mathrm{X}}$ is a typo that should read as $\sqrt{\mathrm{X}}$ <br> Worksheet: What Happens to a Dog...?" <br> For more practice, Worksheet "...Bar of Soap...?" |  |
| 3 | Exponents Quiz <br> 3.4 What is a polynomial | Page 134-135 \# 1-6 |  |
| 4 | Substitution + Application Problems | Page 115 \#7 <br> Page 135-137 \#7-9, 10ab, 11-13, 15, 17 |  |
| 5 | 3.5 Simplifying Polynomials part 1-collecting like terms | Page 151-152 \#1-3,5-9 <br> Challenge: page 153 \#17 |  |
| 6 | 3.6 Simplifying polynomials part 2 - Adding/subtracting polynomials | Page 157-158 \#1-5, 6a |  |
| 7 | Polynomials Quiz <br> 3.7 Distributive Property | Page 166-168 \#1,3ace,5ace,6af,7ce, 8,9,15aceh, 16ac |  |
| 8 | Review | $\begin{aligned} & \text { Page 174-175 \#7-20 } \\ & \text { Pg } 176 \text { \# } 1-14 \\ & \hline \end{aligned}$ |  |
| 9 | Test |  |  |

