Unit #0 – Integer Operations and Solving Basic

Equations

- 1. Integer Operations
- 2. Solving One-Step Equations
- 3. Solving Two-Step Equations

<u>Unit #1 – Real Numbers</u>

- 4. Rational Numbers as Decimals
- 5. Understanding Irrational Numbers
- 6. Comparing and Ordering Real Numbers
- 7. Evaluating Square Roots and Cube Roots
- 8. Solving Equations Using Square Roots and Cube Roots
- 9. Using Properties of Integer Exponents
- 10. More Properties of Exponents
- 11. Using Powers of 10 to Estimate Quantities
- 12. Scientific Notation
- 13. Operations with Numbers in Scientific Notation

Unit #2 – Analyzing and Solving Linear Equations

- 14. Combining Like Terms to Solve Equations
- 15. Solving Equations with Variables on Both Sides
- 16. Solving Multi-Step Equations
- 17. Equations with No Solution or Infinitely Many Solutions (IMS)
- 18. Slope
- 19. Analyzing Linear Equations
- 20. y-Intercept of a Line
- 21. Linear Equations

Unit #3 – Using Functions to Model Relationships

- 22. Relations and Functions
- 23. Representations of Functions
- 24. Comparing Linear Functions
- 25. Writing Functions
- 26. Intervals of Increase and Decrease
- 27. Sketching Functions

Unit #4 – Investigating Bivariate Data

- 28. Scatter Plots
- 29. Trend Lines and Linear/Nonlinear Associations
- 30. Using Linear Models to Make Predications
- 31. Two-Way Frequency Tables
- 32. Two-Way Relative Frequency Tables

<u>Unit #5 – Analyzing and Solving Systems of Linear</u> <u>Equations</u>

- 33. Solving Systems of Equations by Substitution
- 34. Solving Systems of Equations by Elimination

Unit #6 – Congruence and Similarity

- 35. Rotations
- 36. Dilations
- 37. Similar Figures
- 38. Angles, Lines, and Transversals
- 39. Interior and Exterior Angles of a Triangle
- 40. Angle-Angle Triangle Similarity

<u> Unit #7 – The Pythagorean Theorem</u>

- 41. The Pythagorean Theorem
- 42. Converse of the Pythagorean Theorem
- 43. Distance Between Points on the Coordinate Plane

<u> Unit #8 – Surface Area and Volume</u>

- 44. Volume of Cylinders and Cones
- 45. Surface Area and Volume of a Sphere
- 46. Volume of a Pyramid

<u>Unit #9 – Indiana Topics</u>

47. Solving Inequalities

Unit #10 – Polynomials and Factoring

- 48. Adding and Subtracting Polynomials
- 49. Multiplying and Factoring Polynomials
- 50. Multiplying Binomials (FOIL)
- 51. Squaring Polynomials and the Product of a Sum and Difference
- 52. Factoring (x²+bx+c)
- 53. Factoring (ax²+bx+c)