 Course Outline

**Introduction to High School Math**

2012-2013

**Teachers:**

Tammy McIntyre, Heather Godfrey, Debbie McDonnell, Laura Kennedy

**Text Book:**

Math Makes Sense 9

**Topics:**

**Rational Numbers**

(28 days)

What is a Rational number?- decimal / fraction form

Compare and order

Irrational number

Adding Rational Numbers – decimal, improper and mixed form

Problem solving

Subtracting Rational Numbers –decimal, improper and mixed form

Problem solving

Mid-Unit Review

Multiplying Rational Numbers – decimal, improper and mixed form

Problem solving

Dividing Rational Numbers – decimal, improper and mixed form

Problem solving

Order of Operations – decimals, improper and mixed form

Problem Solving

Review/Test

**Powers and Exponent Laws:**

(21 days)

What is a Power?

Powers of 10 and Zero Exponents

Order of Operations with Powers

Mid –Unit Review

Strategies to help simplify expressions with Powers

Exponent Laws 1 – Product of powers

Quotient of powers

Order of Operations

Exponent Laws 2 – Power of a Power

Power of a product

Power of a quotient

Order of Operations

Review/Test

**Square Roots and Surface Area:**

(21 days)

Perfect Squares - including rational numbers

Non-Perfect Squares – estimate (number line) / calculator

Pythagorean Theorem

Surface Area – cubes, rectangular prisms, cylinders, triangular prisms

Combinations of above objects

Review/Test

**Linear Relations**

(23 days)

Writing Equations to Describe Patterns – Written pattern

(Written explanation)

Oral pattern

(Sign/visual information)

Technology (spreadsheet)

Linear Relations – Analyze linear graph

Dependent / Independent Variables

Graphing using a- table of values

-equation

 Problem Solving

**Linear Relations Continued…**

Another Form of the Equation for linear equations – Horizontal lines (y=5)

Vertical lines (x=7)

 Oblique lines (ax+by=c)

Mid-Unit Review

Matching Equations and Graphs

Using Graphs to Estimate Values – interpolation

-extrapolation

Technology

Review / Test

**Time-Line Revision / Storm Day Make-up / Exam Review**

**Marking Scheme:**

Homework 10%

Quizzes / Assignments 20%

Tests 40%

Exam 30%