 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%