Sec 4 SN Checklist

Term 1:

Pre-Algebra (review)

- ☐ Appropriate use of brackets (understanding of distributive property)
- ☐ Times tables & perfect squares
- ☐ Properties of exponents
- ☐ Solving equations of degree 1

Radicals

- ☐ Simplifying
- ☐ Add, subtract, multiply and divide radicals
- ☐ Rationalize the denominator of a radical which is a monomial
- ☐ Rationalize the denominator of a radical which is a binomial

Factoring

- ☐ Greatest common factor
- ☐ Difference of squares
- ☐ Perfect square trinomial
- ☐ Sum and product
- ☐ Sum & Difference of Cubes

Rational Expressions

- ☐ Simplifying
- ☐ Multiplying/Dividing
- ☐ Adding/Subtracting

Functions

- □ Definition/Identifying a function
- □ Function notation
- □ Increasing/Decreasing (Variation)
- □ Absolute max, min/Relative max, min
- □ Initial value (y-intercept), Zeros
- □ Positive/Negative (Signs)

Linear Functions

- □ Direct variation/parameters
- □ Partial variation/parameters
- □ Slope, initial value
- □ Finding the rule given point/slope
- □ Finding the rule given 2 points
- □ Finding the rule from a graph
- □ Graphing lines from slope/int form

Term 2:

Systems of Equations

- □ Solving by Comparison
- □ Solving by Elimination
- □ Solving by Substitution
- □ Applications

Quadratic Functions

- □ Basic
- □ Parameters (a, b, h, k)
- □ Standard/general/factored forms
- □ Graphing
- □ Quadratic inequalities
- □ Rule - Given vertex & a point
- □ Rule - Given zeros & a point
- □ Rule - Given table of values
- □ Given 2 symmetric pts and a min/max
- □ Finding the zeros
- □ Solving by factoring
- □ Solving by completing the square
- □ Solving by Quadratic Formula
- □ Importance/Applications
- □ Semi-Linear Systems

Greatest Integer Functions

- □ Basic
- □ Evaluating a Greatest Integer Function
- □ Parameters (a, b, h, k)
- □ Graphing
- □ Given graph find the rule
- □ Applications
- □ Solving GI equations
- □ Comparing functions

Analytic Geometry

- □ Lines – slope int, general, symmetric
- □ Parallel & Perpendicular Lines
- □ Linear inequalities
- □ Distance between 2 points
- □ Midpoint
- □ Part to part/Part to whole ratios
- □ Find Internal point of division given a:b
- □ Find a:b given internal point of division
- □ Find endpoint given point of division
- □ Distance point to a line
- □ Applications

Term 3:

Isometric Triangles
- □ Definition
- □ SSS
- □ SAS
- □ ASA
- □ Proofs

Similar Figures
- □ Definition
- □ SSS
- □ SAS
- □ AA
- □ Perimeter and Area of figures
- □ Area and Volume of solids
- □ Similarity – ratio of side, area, volume
- □ Equivalent figures – area/volume
- □ Proofs

Trigonometry
- □ Definition
- □ Metric Relations in right triangles
- □ Similar right triangles, special triangles
- □ Sine, cosine & tangent rations
- □ Finding a missing side in a rt triangle
- □ Finding a missing angle in a rt triangle
- □ Sine Law
- □ Law of Cosines – finding side length
- □ Law of Cosines – finding angle
- □ Area of triangles
- □ Applications

Statistics
- □ Definition/Notation
- □ Linear Correlation: Qualitative
- □ Linear Correlation: Quantitative
- □ Line of Regression: Mayer Line / Median-median Line
- □ Applications

Equivalence & Similarity
- □ Definition of Equivalence
- □ Similarity Ratios
- □ Maximizing and minimizing perimeter/area/volume
- □ Applications