# **TESTED ITEMS – Math 8**

## District Assessment 1

### Chapters Covered: 1 - 2

#### **Skills Tested:**

- 1. Evaluate variable expression through numerical substitution
- 2. Recognize and use commutative, associative and distributive properties of addition and multiplication (numbers and variables)
- 3. Identify inverses and identities for addition and multiplication
- 4. Solve one-step linear equations
- 5. Solve two-step linear equations
- 6. Add and subtract to simplify polynomial expressions
- 7. Properties: distributive  $3(2+4) = (3x^2) + (3x^4)$
- 8. Solve one-step linear inequalities
- 9. Solve two-step linear inequalities

## District Assessment 2

### **Chapters Covered: 3 - 5**

### **Skills Tested:**

- 1. Write linear equations and inequalities
- 2. Determine the slope of a line
- 3. Analyze transformations and relate properties to similarity and congruence (translation)
- 4. Analyze transformations and relate properties to similarity and congruence (reflection)
- 5. Analyze transformations and relate properties to similarity and congruence (rotation)
- 6. Analyze transformations and relate properties to similarity and congruence (dilation)
- 7. Recognize and name rational numbers
- 8. Solve for a variable in a formula with one step
- 9. Use formula to find perimeter of common and complex figures
- 10. Use ratio and proportion to determine the unknown sides of similar triangles

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## District Assessment 3

## Chapters Covered: 6 - 8

#### **Skills Tested:**

- 1. Use and determine percents including those greater than 100 and less than 1
- 2. Calculate percent of change (sales tax, discounts, mark-up)
- 3. Write numbers in scientific notation
- 4. Recognize angle relationships
- 5. Determine angle measures using angle relationships
- 6. Classify angle pairs
- 7. Identify and use relationships among parts of complex 2D and 3D figures (e.g.parallel sides, congruent faces)
- 8. Identify and use properties of subsets of polygons
- 9. Determine area of circle, triangle, parallelograms and trapezoids
- 10. Determine the circumference of a circle
- 11. Determine area of an irregular figure

## District Assessment 4

### Chapters Covered: 9 – 12

### Skills Tested:

- 1. Identify and use relationships among parts of complex 2D and 3D figures (e.g.parallel sides, congruent faces)
- 2. Select an appropriate method of displaying data (bar, box & whiskers, circle, line, stem & leaf,)
- 3. Recognize that data can be manipulated
- 4. Use logical reasoning (inductive and deductive)
- 5. Design various methods to gather data
- 6. Use models/simulations to generate data
- 7. Express sequences algebraically
- 8. Given an arithmetic or geometric sequence, find the nth term of the sequence
- 9. Add and subtract to simplify polynomial expressions

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