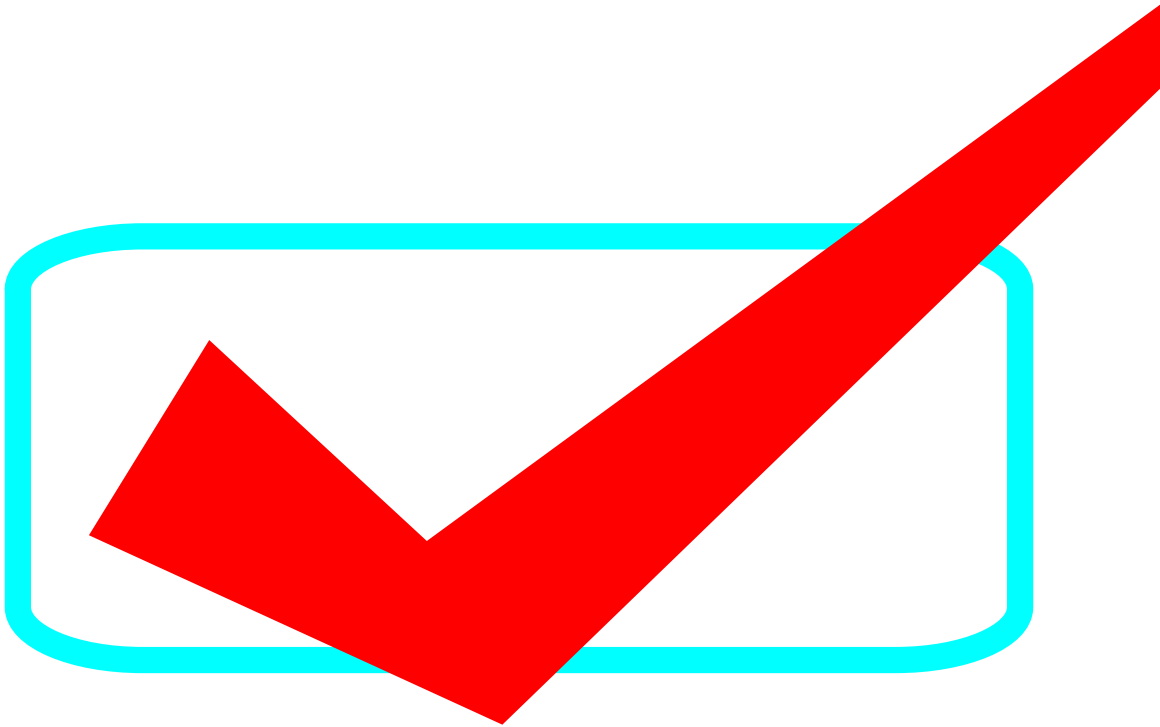

PERFORMANCE STANDARDS
2004-2005



M/J Mathematics 2
DUVAL COUNTY SCHOOLS
JACKSONVILLE, FLORIDA

M/J Mathematics 2
Performance Standards
2004-2005

5.0 Measurement

The student will:

- 5.1 Find areas and perimeters of rectangular shapes and non-rectangular shapes.
- 5.2 Develop procedures for finding areas and perimeters of rectangles, parallelograms, triangles, and circles.
- 5.3 Use area and perimeter to solve applied problems.
- 5.4 Find perimeters and areas of non-rectangular figures by ‘covering’ the figures with grids, tiles, or other objects and ‘surrounding’ the figure with string, straight-line segments, or other objects.
- 5.5 Reason about spatial relationships.
- 5.6 Use models and representations of models to solve problems.

6.0 Working with Rational Numbers

The student will:

- 6.1 Estimate sums and differences of fractions and decimals.
- 6.2 Add and subtract fractions.
- 6.3 Use area to model multiplication of fractions.
- 6.4 Add, subtract, multiply, and divide with decimals.

9.0 Patterns and Functions

The student will:

- 9.1 Sketch coordinate graphs to show relationship between two variables.
- 9.2 Describe regular or predictable change in data from given patterns.
- 9.3 Select the appropriate range of values for given variables.
- 9.4 Create tables, graphs, and simple symbolic rules that describe the patterns of change.
- 9.5 Describe relationships among forms of data representation – words, tables, graphs, and symbolic rules.
- 9.6 Make decisions using tables, graphs, and rules.

10.0 Similarity

The student will:

- 10.1 Identify similar figures visually and by comparing sides and angles.
- 10.2 Recognize that lengths between similar figures change by a constant scale factor.
- 10.3 Build larger or smaller similar shapes from copies of a basic shape.
- 10.4 Divide a shape into smaller, similar shapes.
- 10.5 Describe the relationship between similarity and equivalent fractions.
- 10.6 Describe the effect of scale factor on length ratios and area ratios.
- 10.7 Determine and use scale factors to find unknown lengths.
- 10.8 Use the concept of similarity to solve real-world problems.
- 10.9 Use geometry software to explore similarity and transformations.
- 10.10 Make connections between algebra and geometry.

11.0 Ratio, Proportion, and Percent

The student will:

- 11.1 Demonstrate the use of the term ‘ratio’, ‘proportion’, and ‘percent’ to ask comparison questions.
- 11.2 Find equivalent ratios.
- 11.3 Represent data in tables and graphs.
- 11.4 Set up and solve proportions that arise in applications.
- 11.5 Look for patterns in tables that will allow predictions to be made beyond the tables.

12.0 Integers

The student will:

- 12.1 Represent integers on the number line.
- 12.2 Model situations with integers.
- 12.3 Compare integers using $<$, $=$, and $>$ symbols.
- 12.4 Develop strategies for adding, subtracting, multiplying, and dividing integers.
- 12.5 Use integers to solve problems.
- 12.6 Find inverses for given integers.
- 12.7 Sketch coordinate graphs in four quadrants.

13.0 Volume and Surface Area

The student will:

- 13.1 Conceptualize volume as a measure of *filling* an object.
- 13.2 Conceptualize surface area as a measure of *wrapping* an object.
- 13.3 Find volumes and surface areas for rectangular prisms.
- 13.4 Find volume and surface areas for cylinders.
- 13.5 Reason about problems involving the surface areas