

“DOWN AND DIRTY GED MATH”

STUDENT REPORT

NAME _____

DATE _____

- Use a decision making, problem solving process, vocabulary and operational.
- Solve fraction, decimal, and percent problems.
- Calculate percent
- Compute sales tax, unit prices, and sales prices.
- Solve real world problems using probability.
- Solve algebraic equations.
- Solve one and two-step algebra problems.
- Find squares and square roots.
- Solve measurement problems.
- Find perimeter, area, and volume.
- Interpret and compare data from graphs and charts.
- Know different types and relationships of angles and triangles including the Pythagorean relationship.

COMPETENCY OVERVIEW

- 1) Use decision-making problems solving process, vocabulary, and operational terms.
 - I) Vocabulary and operational terms.
 - II) Steps in solving real world problems.
- 2) Solve fractions, decimal, and percent problems.
 - I) Solve fractions.
 - II) Solve decimals.
- 3) Calculating percents.
 - I) Find percents.
- 4) Compute sales tax, unit price and sale price.
 - I) Solve word problems using the interest, distance and cost formula.
 - II) Calculating net value.
 - III) Find the total for an order after calculating the cost of two items and sales tax.
 - IV) Calculate the difference between hourly and daily wages.
- 5) Solve real world problems using probability.
 - I) Associate verbal names, written word name, written word name and standard numeral with ratios and proportions.
 - II) Understand the relationship between ratio and proportion and fractions.
 - III) Solve word problems using ratio and proportion.
- 6) Solve algebraic equations.
 - I) Writing algebraic expressions.
 - II) Constructing a rectangular coordinates system showing positive and negative X and Y values.
 - III) Describing a variety of patterns and relationships.

- 7) Solve one and two step algebra equations with one variable.
 - I) Solving one step equations.
 - II) Solving two-step equations.
- 8) Finding squares and square roots.
 - I) Solve equations with the mathematic concepts of squares, square roots, and order of operations.
- 9) Solve measurement problems.
 - I) Convert between metric units.
 - II) Convert U.S. system of measures (yards-feet-inches; cups-pints-gallons).
- 10) Find perimeter, area, and volume.
 - I) Solve geometry problems using area, perimeter, and volume formulas.
 - II) Solve real-world problems by estimating measurements.
- 11) Interpret and compared data from a graph and table.
 - I) Interpret and compare data.
- 12) Know different types and relationships of angles and triangles.
 - I) Angles.
 - II) Triangles.

COMPETENCY OUTLINE

- 1) Use decision-making, problem solving process, vocabulary, and operational term.
 - I) Vocabulary and operational terms.
 - a) Recognizing clue words in choosing operations
 - Add, plus, total.
 - Subtract, difference, left, remaining.
 - Multiply, times, several.
 - Divide.
 - II) Steps in solving real-world problems.
 - b) Explaining the reasoning steps in solving real-world problems
 - Determining the question.
 - Identifying the information given
 - Deciding on the operation
 - Working and checking
 - Making certain the answer is logical.
- 2) Solve fraction, decimal percent problems.
 - I) Solve fraction.
 - a) Writing numbers as fractions.
 - b) Understanding the concept of numerators and denominators.
 - c) Add, subtract, multiply and divide fractions.
 - d) Identifying proper, improper, and mixed fractions.
 - e) Converting from mixed to improper fractions
 - f) Converting from improper to mixed fractions
 - g) Reduce common fractions
 - h) Convert fractions to decimals
 - i) Convert fractions to percents
 - j) Convert decimals to fractions
 - k) Convert decimals to percents
 - l) Convert percents to fractions
 - m) Convert percents to decimals
 - II) Solve decimals.
 - a) Add, Subtract, multiply and divide decimals
 - b) Convert common fractions to decimals
 - c) Convert decimals to fractions.
 - d) Understanding the relationship between money and decimals.
- 3) Calculating Percents.
 - a) Finding a percent of a number

- b) Finding what percent one number is of another.
 - c) Finding the total when a percent is given.
- 4) Compute sales tax, unit price and sale price.
 - I) Solve word problems using the interest, distance, and cost formula.
 - a) Interest formula
 - b) Distance formula
 - c) Cost formula
 - II) Calculating net value.
 - III) Find the total for an order after calculating the cost of two items and sales tax.
 - a) Determining sales tax and purchase when given the rate
 - IV) Calculate the difference between hourly and daily wage.
 - a) Calculate differences between two hourly wages
 - b) Compute overtime pay
 - c) Compute deduction based on percent
 - d) Compute yearly gross and net pay
- 5) Solve real word problems using probability
 - I) Associate verbal names, written word name, written word name and standard numeral with ratios and proportions.
 - II) Understand the relationship between ratio and proportion and fractions.
 - III) Solve word problems using ratio and proportion.
 - a) Cross multiply to solve proportions
- 6) Solve algebraic equations.
 - I) Writing Algebraic expressions.
 - a) Set up and solve algebraic equations from word problems
 - II) Constructing a rectangular coordinate system showing positive and negative X and Y values.
 - III) Describing a variety of patterns and relationships.
 - a) Manipulative
 - b) Tables
 - c) Graphs
- 7) Solve one and two-step algebra equations with one variable.
 - I) Solving one step equations.
 - a) One variable

- II) Solving two-step equations.
 - a) one variable and two step equations

- 8) Finding squares and square roots.
 - I) Solve equations with the mathematic concepts of square, square roots, and order of operations.
 - a) Finding squares of numbers.
 - b) Finding square roots of perfect squares.
 - c) Solving simple problems by applying algebraic order of operations.

- 9) Solve measurement problems.
 - I) Convert between metric units.
 - a) Measure using metrics.
 - b) Convert within the metric system measures from prefix to another.

 - II) Convert U.S. system of measures (yards-feet-inches; cups-pints-gallons).
 - a) Solving linear measurement problems with inches, feet, or yards.
 - b) Solving capacity problems with cups, pints, quarts or gallons.

- 10) Find perimeter, area and volume.
 - I) Solve geometry problems using area, perimeter, and volume formulas.
 - a) Area (square, rectangle, triangles, cubes)
 - b) Perimeter
 - c) Volume
 - d) Circumference (circles)

 - II) Solve real-world problems by estimating measurements.
 - a) Length
 - b) Time
 - c) Weight
 - d) Temperature
 - e) Money

- 11) Interpret and compared data from a graph and table.
 - I) Interpret and compare data.
 - a) Collecting, organizing, displaying and analyzing data using bar graphs, circle graphs, line graphs, pictographs and charts.
 - b) Reading a simple bar graph or line graph.
 - c) Interpreting data in charts, tables, plots, graphs, and maps.
 - d) Understanding and finding mean, median, and mode.
 - e) Locating a point on a highway.

12) Know different types and relationship of angles and triangles.

I) Angles.

- a) types
- b) degrees
- c) relationships

II) Triangles.

- a) types
- b) degrees
- c) symmetry
- d) congruency
- e) Pythagorean relationship