

Web Demo and Topics

Math A Questions

- 1) a) On the same set of axes, graph the following equations.
- (1) $x + y = 7$
 - (2) $3y - 2x = 6$
 - (3) $y = -2$
- b) Find the area of the triangle formed by the lines drawn in part a.
- 1) 90 2) 45 3) 70 4) 35
- 2) Which number expresses 72 kilometers per hour as meters per hour?
- 1) 7.2×10^{-2}
 - 2) 7.2×10^2
 - 3) 7.2×10^{-4}
 - 4) 7.2×10^4
- 3) A ship on the ocean surface detects a sunken ship on the ocean floor at an angle of depression of 50° . The distance between the ship on the ocean surface and the sunken ship on the ocean floor is 200 meters.
- If the ocean floor is level in this area, how far above the ocean floor, to the nearest meter, is the ship on the surface?
- 1) 153
 - 2) 160
 - 3) 129
 - 4) 238
- 4) Solve the following system of equations graphically and check:
- $$\begin{aligned}y &= -x + 2 \\ 3y - 2x &= -9\end{aligned}$$
- 1) $x = -3, y = 1$
 - 2) $x = 3, y = 2$
 - 3) $x = 3, y = -1$
 - 4) $x = 2, y = 3$
- 5) Let p represent "I am happy."
Let q represent "I am wearing green."
- a. Write each of the sentences below in symbolic form.
- 1) If I am happy, then I am not wearing green.
 - 2) If I am wearing green, then I am happy.
- b. Construct a truth table to determine whether or not sentences 1) and 2) in part a are logically equivalent. Justify your answer.

Math A Topics

Area - Circle
Area - Parallelogram
Area - Rectangle
Area - Shaded Region
Area - Square
Area - Trapezoid
Area - Triangle
Area From Coordinate Geometry
Circumference
Combinations
Constructions

Logic - Bi-conditional
Logic - Conjunction
Logic - Contra-positive
Logic - Converse
Logic - Disjunction
Logic - Drawing Conclusions
Logic - Equivalence
Logic - Implication
Logic - Inverse
Logic - Negation
Logic - Proofs

Coordinate Geometry - Area
 Coordinate Geometry - Distance
 Coordinate Geometry - Equation of a circle
 Coordinate Geometry - Midpoint
 Coordinate Geometry - Points
 Coordinate Geometry - Proofs
 Coordinate Geometry - Slope
 Counting Methods and Sets
 Decimals - In Equations
 Dimensional Analysis
 Evaluating Expressions and Formulas
 Exponents
 Factorial
 Factoring - Common Monomial
 Factoring - Difference of Two Squares
 Factoring - Quadratic Trinomial
 Fractions - Combining
 Fractions - In Equations
 Fractions - Reduce
 Finite Mathematical Systems
 Frequency Distributions
 Geometry - Complementary Angles
 Geometry - Corresponding Angles
 Geometry - Parallel Lines: Alt. Int. Angles
 Geometry - Parallel Lines: Graphs
 Geometry - Similar Triangles
 Geometry - Supplementary Angles
 Geometry - Vertical Angles
 Graphs - Circle
 Graphs - Histogram
 Graphs - Identify
 Graphs - Inequalities
 Graphs - Line
 Graphs - Parabolas
 Graphs - Points
 Graphs - Slope
 Graphs - Solving Sets of Inequalities
 Graphs - Solving Systems of Equations
 Inequalities
 Irrational and Rational Numbers
 Linear Functions & Graphs - Eqs. of
 Linear Functions & Graphs - Slope
 Linear Functions & Graphs - $y = mx + b$
 Linear Functions - Linear Equations
 Linear Equations and Expressions
 Locus
 Undefined Expressions
 Variations
 Venn Diagrams
 Verbal Problems - Age
 Verbal Problems - Algebraic Reasoning
 Verbal Problems - Area
 Verbal Problems - Average
 Verbal Problems - Digit
 Verbal Problems Geometric
 Volume
 Logic - Tautology
 Logic - Truth tables
 Logic - Truth Values
 Modeling - Graphs of Linear Equations
 Monomials & Polynomials - Addition
 Monomials & Polynomials - Division
 Monomials & Polynomials - Multiplication
 Monomials & Polynomials - Subtraction
 Percent
 Perimeter
 Polygons - Angle Measure
 Probability - Involving Areas
 Probability - Permutations Counting
 Probability - Sample space
 Probability - Tree Diagram
 Probability
 PROPERTIES of NUMBER SYSTEMS
 Properties - Quadrilaterals
 Properties - Triangle: Exterior Angle
 Properties - Triangle: Isosceles
 Properties - Triangle: Sum of Angles
 Properties - Triangle: Type of Triangle
 Pythagorean Theorem
 Quadratic Equations
 Ratio
 Rations and Proportions
 Scientific Notation
 Shapes
 Special Right Triangles
 Square Roots - Combining
 Square Roots - Simplify
 Statistics - Mean
 Statistics - Median - Grouped Data
 Statistics - Median - Ungrouped Data
 Statistics - Mode
 Statistics - Quartiles & Percentiles
 Statistics - Stem and Leaf Plots
 Summetry - Point & Line
 System of Equations - Solving Algebraically
 Transformations - Coordinate Line Reflections
 Transformations - Dilations
 Transformations - Graphing Dilations
 Transformations - Line Reflections
 Transformations - Mappings & Functions
 Transformations - Rotations
 Transformations - Translations
 Translating to Formulas & Equations
 Trigonometry of Right Triangles
 Verbal Problems - Inequities
 Verbal Problems - Investment
 Verbal Problems - Mixture & Solution
 Verbal Problems - Motion
 Verbal Problems - Number and Integer
 Verbal Problems - Percent -
 Verbal Problems - Perimeter