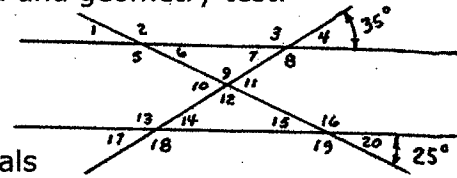


STUDY GUIDE FOR QUALIFICATION TEST

This guide is for use in preparing for the required algebra and geometry test.

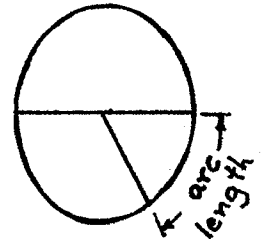
GEOMETRY

Relations of Angles between Parallel Lines and Transversals

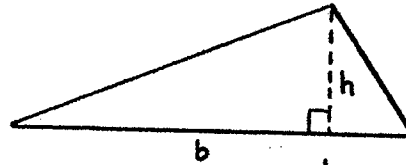


Elements of a Circle: Area, Circumference, Radius, Diameter

Figuring the Arc Length of a Fractional Part of a Circle



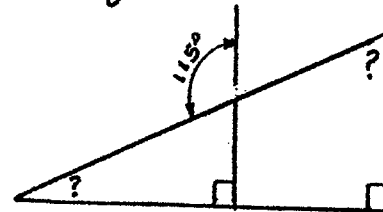
Elements and Types of Triangles



Elements of an Isosceles Triangle

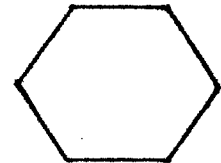
Figuring Angles in a Right Triangle

Figuring the Side of a Right Triangle

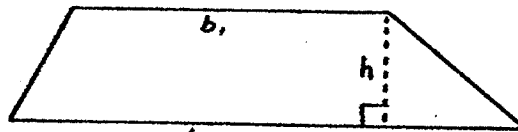


Comparing Angles in Similar Right Triangles

Elements of a Regular Polygon, Sum of Interior Angles



Elements of a Trapezoid



ALGEBRA

Multiplying and Dividing Numbers by Use of Exponents

$$A^5 \cdot A^7 = ? \quad \frac{A^{17}}{A^8} = ?$$

Use of Decimals

$$3.66 \times 1.007 = ?$$

Convert a Linear Distance from a Fraction to a Decimal

$$57' - 11\frac{7}{16}'' = 57.95'$$

Convert a Linear Distance from a Decimal to a Fraction

$$14.81' = 14' - 9\frac{3}{4}''$$

Use of Ratio and Proportions

$$\frac{4}{20} = \frac{?}{60}$$

Subtracting Negative Numbers

subtract -13.236 from -15.418

Subtracting Unlike Algebraic Terms

subtract $6x - 4y$ from $-4x + 4y$

Factoring Quadratic Equations

$$A^2 + 9A - 36 = 0$$

Solving Quadratic Equations

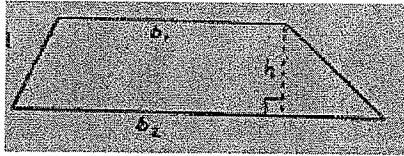
Solve for A after factoring

Solving Simultaneous Equations by Subtracting or Addition

$$\begin{array}{r} 16A - 14B = 76 \\ -8A - 18B = 12 \\ \hline \end{array}$$

Following a Given Formula

Solving Written Problems with Given Formulas



Elements of a Trapezoid

ALGEBRA

Multiplying and Dividing Numbers by Use of Exponents $A^5 \bullet A^7 = ?$ $A^{17} \div A^8 = ?$

Use of Decimals 3.66×1.007

Convert a Linear Distance from a Fraction to a Decimal $57' 11\frac{3}{4}'' = 57.98$

$$11.75 / 12 = 0.98 = 57.98$$

Convert a Linear Distance from a Decimal to a Fraction $14.81' = 14' 9\frac{3}{4}''$

$$.81 \times 12 = 9.72 = 9'', .72 \times 16 = 11.52 = 12/16 = 14' 9\frac{3}{4}''$$

Use of Ratio and Proportions $4/20 = ?/60$

Subtracting Negative Numbers **subtract -13.236 from -15.418**

Subtracting Unlike Algebraic Terms **subtract $6x - 4y$ from $-4x + 4y$**

Factoring Quadratic Equations $A^2 + 9A - 36 = 0$

Solving Quadratic Equations **Solve for A after factoring**

Solving Simultaneous Equations

by Subtracting or Addition:

$$16A - 14B = 76$$

$$\underline{-8A - 18B = 12}$$