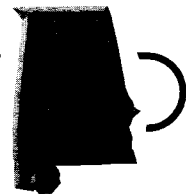


Reference Page



Use the information below to answer questions on the Alabama High School Graduation Exam.

Some Abbreviations Used in Formulas


b_1, b_2 = bases of a trapezoid

b = base of a polygon

h = height or altitude

l = length

w = width

 symbol for a right angle

$m\angle$ = the measure of an angle

A = area

C = circumference

r = radius

d = diameter

π = 3.14

P = perimeter

D = distance

M = midpoint

m = slope

$S.A.$ = surface area

V = volume

B = area of the base

S = sum of interior angles of a convex polygon

n = number of sides of a convex polygon

Formulas

Triangle: $A = \frac{1}{2}bh$

Parallelogram: $A = bh$

Rectangle: $A = lw$

Trapezoid: $A = \frac{1}{2}h(b_1 + b_2)$

Circle: $C = \pi d$

$C = 2\pi r$

$A = \pi r^2$

Distance = rate \cdot time

Interest = principal \cdot rate \cdot time

Distance Formula:

$$D = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

Midpoint Formula: $M = \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}\right)$

Slope Formula: $m = \frac{y_2 - y_1}{x_2 - x_1}$

Sum of Measures of Interior Angles of a Convex Polygon: $S = 180(n - 2)$

Quadratic Formula: $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

Pythagorean Theorem: $c^2 = a^2 + b^2$

	Surface Area	Volume
Rectangular Prism	S.A. = $Ph + 2B$ or S.A. = $2(wh + lh + lw)$	$V = Bh$ or $V = lwh$
Cylinder	S.A. = $2\pi rh + 2\pi r^2$	$V = \pi r^2 h$

Forms of Equations

Standard form of an equation of a line: $Ax + By = C$

Slope-intercept form of an equation of a line: $y = mx + b$

Point-slope form of an equation of a line: $y - y_1 = m(x - x_1)$