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 · time

Interest = principal · rate · 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: $y - y_1 = m(x - x_1)$