GED® Formula Sheet

This page will be provided when you take the GED[®] Mathematics Test. Although you do not need to memorize these formulas, it is a good idea to be familiar with the contents of this page so that you will know when to use it.

FORMULAS

AREA of a:

square $Area = side^2$

rectangle Area = length \times width parallelogram Area = base \times height triangle Area = $\frac{1}{2} \times$ base \times height

trapezoid Area = $\frac{1}{2}$ × (base₁ + base₂) × height

circle Area = $\pi \times \text{radius}^2$; π is approximately equal to 3.14.

PERIMETER of a:

square Perimeter = $4 \times \text{side}$

rectangle Perimeter = $2 \times \text{length} + 2 \times \text{width}$ triangle Perimeter = $\text{side}_1 + \text{side}_2 + \text{side}_3$

CIRCUMFERENCE of a:

circle Circumference = $\pi \times$ diameter;

 π is approximately equal to 3.14.

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VOLUME of a:

cube $Volume = edge^3$

COORDINATE GEOMETRY

distance between points = $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$; (x_1,y_1) and (x_2,y_2) are two points in a plane. slope of a line = $\frac{y_2 - y_1}{x_2 - x_1}$; (x_1,y_1) and (x_2,y_2) are two points on the line.

PYTHAGOREAN RELATIONSHIP

 $a^2 + b^2 = c^2$; a and b are legs and c the hypotenuse of a right triangle.

MEASURES OF CENTRAL TENDENCY

mean = $\frac{x_1 + x_2 + ... + x_n}{n}$, where the x's are the values for which a mean is desired, and n is the total number of values for x.

median = the middle value of an odd number of <u>ordered</u> scores, and halfway between the two middle values of an even number of <u>ordered</u> scores.

SIMPLE INTEREST interest = principal \times rate \times time

DISTANCE $distance = rate \times time$

TOTAL COST total cost = (number of units) \times (price per unit)