

Section 2.2: Formulas

Wednesday, October 02, 2013
10:09 AM

note: functions
covered in
Math 173

formula: an equation involving two or more variables

in science and technology, a formula is an equation in two or more variables which states the relationship between actual physical quantities (mass, volume, radius, etc.)

examples:

$$a + 2b = c$$

$$A = \pi r^2$$

$$V = lwh$$

$$y = mx + b$$

Solving for a variable:

example: solve for x :

$$ax + 15c = 10x$$

$$15c = 10x - ax$$

$$\frac{15c}{10-a} = \frac{x(10-a)}{10-a}$$

$$\frac{15c}{10-a} = x$$

$$x = \frac{15c}{10-a} \quad \text{or} \quad \frac{-15c}{a-10}$$