

Algebra Project - Solving Formulas

One of the most useful concepts you will learn this year is how to solve a formula for a specific variable. We have put together a list of formulas that you will use in math classes in the future, science classes, and in everyday life. You will need to solve these equations for every variable in the formula **All of the work that you do to solve these formulas should be written neatly on the attached worksheets along with a creative title page.**

Example-

Potential Energy Formula given as $P = mgh$

You will need to solve for P , m , g , and h . Here is what it should look like on your worksheet.

Potential Energy Formula

Given			
$P = mgh$	$m = \frac{P}{gh}$	$g = \frac{P}{mh}$	$h = \frac{P}{mg}$

Grading:

This will count as 2 quiz grades for this 6 weeks.

It was assigned on B-day: 9/6/12 A-Day: 9/7/12

It will be due on B-Day: 9/18/12 A-Day: 9/19/12

*Neat and attractive work is expected for this project! Points will be deducted if this is not the case!

*Formulas that are not solved for ALL the variables will not be counted.

***No work shown, No Credit given!**

Formulas

Required Formulas

Distance	$d = rt$
Perimeter of a Rectangle	$P = 2L + 2W$
Area of a Triangle	$A = \frac{1}{2}bh$
Kinetic Energy	$K = \frac{1}{2}mv^2$
Force	$f = ma$
Average Velocity (speed)	$v = \frac{d}{t}$
Density	$d = \frac{m}{v}$
Area of a Trapezoid	$A = \frac{(b_1 + b_2)h}{2}$ or $A = \frac{1}{2}(b_1 + b_2)h$
Area of a Rectangle	$A = LW$
Lateral Surface Area of a Cylinder	$SA = 2\pi rh$
Volume of a Cone	$V = \frac{1}{3}\pi r^2h$
Volume of a Cylinder	$V = \pi r^2h$
Volume of a Rectangular Prism	$V = Lwh$
Current	$I = \frac{V}{R}$
Interest Formula	$I = prt$

Work for Formula Project

Distance

Given		
$d =$	$r =$	$t =$

Perimeter of a Rectangle

Given		
$P =$	$L =$	$W =$

Area of a Triangle

Given		
$A =$	$b =$	$h =$

Kinetic Energy

Given		
$k =$	$m =$	$v =$

Force

Given		
$f =$	$m =$	$a =$

Average Velocity

Given		
$v =$	$d =$	$t =$

Density

Given		
$d =$	$m =$	$v =$

Area of a Trapezoid

Given			
$A =$	$b_1 =$	$b_2 =$	$h =$

Area of a Rectangle

Given		
$A =$	$L =$	$w =$

Lateral Surface Area of a Cylinder

Given		
$SA =$	$r =$	$h =$

Volume of a Cone

Given		
$V =$	$r =$	$h =$

Volume of a Cylinder

Given		
$V =$	$r =$	$h =$

Volume of a Rectangular Prism

Given			
$V =$	$L =$	$w =$	$h =$

Current

Given		
$I =$	$V =$	$R =$

Interest Formula

Given			
$I =$	$p =$	$r =$	$t =$