# Research for the Math and Science Game 

Use the listed web sites to find the equations that you will need to answer the questions listed and the answers for the math and science game.

Math:
Use the web site http://library.thinkquest.org/20991/gather/formula/ to find the following formulas, and then use the formulas to find the answers to the problems.

Pythagorean Theorem
Circumference of a Circle
Area of a Square
Area of a Rectangle
Area of a Circle
Area of a Triangle
Volume of a Cube
Volume of a Sphere
Surface Area of a Cube
Slope of a line
Fahrenheit to Celsius
Celsius to Fahrenheit
Celsius to Kelvin
Use the formulas to answer the following:
Pythagorean Theorem:

1. $A=6, B=3$
2. $A=4, B=8$

Circumference of a Circle

1. $\mathrm{R}=7$
2. $\mathrm{R}=12.7$

Area of a Square

1. $\mathrm{S}=6$
2. $\mathrm{S}=11.8$

Area of a Rectangle

1. $\mathrm{X}=12, \mathrm{Y}=5$
2. $X=16, Y=11$

Area of a Circle

1. $\mathrm{R}=4.75$
2. $R=7$

Area of a Triangle

1. $\mathrm{B}=5, \mathrm{H}=7$
2. $\mathrm{B}=8, \mathrm{H}=15$

Volume of a Cube

1. $\mathrm{S}=4$
2. $S=9$

Volume of a Sphere

1. $\mathrm{R}=2$
2. $\mathrm{R}=3$

Surface Area of a Cube

1. $\mathrm{S}=3.75$
2. $\mathrm{S}=5.25$

Slope of a Line

1. $\mathrm{P} 1=3,5 \mathrm{P} 2=6,8$
2. $P 1=4,2 \quad P 2=-5,3$

Fahrenheit to Celsius

1. $\mathrm{F}=65$
2. $\mathrm{F}=-17$

Celsius to Fahrenheit

1. $\mathrm{C}=15$
2. $\mathrm{C}=52$

Celsius to Kelvin

1. $\mathrm{C}=-23$
2. $C=-6$

Science:
Use the web site http://www.middleschoolscience.com/formulas.pdf to find the following formulas, and then use the formulas to find the answers to the problems.

Volume of a Solid
Speed
Pressure
Density

## Acceleration

Use the formulas to answer the following:
Volume of a Solid

1. $\mathrm{H}=4, \mathrm{~L}=3, \mathrm{~W}=5$
2. $\mathrm{H}=5, \mathrm{~L}=4.8, \mathrm{~W}=6.5$

Speed

1. $\mathrm{D}=34, \mathrm{~T}=12$
2. $\mathrm{D}=54, \mathrm{~T}=8.5$

Pressure

1. $\mathrm{F}=6, \mathrm{~A}=3.5$
2. $\mathrm{F}=27, \mathrm{~A}=4.7$

Density

1. $\mathrm{M}=32, \mathrm{~V}=17$
2. $M=44, V=3.76$

Acceleration

1. $\mathrm{FS}=60, \mathrm{OS}=0, \mathrm{~T}=20$
2. $\mathrm{FS}=100, \mathrm{OS}=15, \mathrm{~T}=32$
