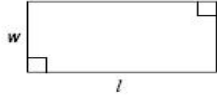


# MATHEMATICS

## FORMULA SHEET

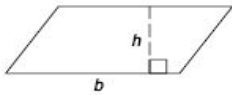
Formulas that you may need to work questions are found below.  
You may use calculator  $\pi$  or the number 3.14.

2008  
Grade 8

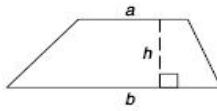


$$P = 2l + 2w$$

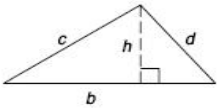
$$A = lw$$



$$A = bh$$

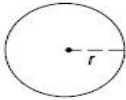


$$A = \frac{1}{2}h(a + b)$$



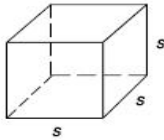
$$P = b + c + d$$

$$A = \frac{1}{2}bh$$



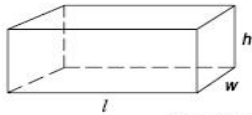
$$C = 2\pi r$$

$$A = \pi r^2$$



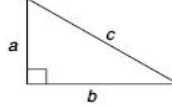
$$SA = 6s^2$$

$$V = s \cdot s \cdot s$$



$$SA = 2lw + 2lh + 2wh$$

$$V = lwh$$



**Pythagorean Theorem :**  
 $a^2 + b^2 = c^2$

**Distance :**  $d = rt$

**Simple Interest :**  $I = prt$

**Degrees in a 3 to 8 sided figure :**

Sum of angle measures =  $180(n - 2)$ ,  
where  $n$  = number of sides

**Temperature Conversions :**

$$^{\circ}C = \frac{5}{9} (^{\circ}F - 32) \quad ^{\circ}F = \frac{9}{5} ^{\circ}C + 32$$

**Customary Conversions :**

- 1 mile = 5,280 feet (ft)
- 1 yard (yd) = 3 feet
- 1 foot = 12 inches (in.)
- 1 ton (T) = 2,000 pounds (lb)
- 1 pound = 16 ounces (oz.)
- 1 gallon (gal) = 4 quarts (qt)
- 1 quart = 2 pints (pt)
- 1 pint = 2 cups (c)
- 1 cup = 8 fluid ounces
- 1 day = 24 hours (hr)
- 1 hour = 60 minutes (min)
- 1 minute = 60 seconds (sec)

**Metric Conversions :**

- 1 kilometer = 1000 meters
- 1 hectometer = 100 meters
- 1 dekameter = 10 meters
- 1 meter
- 1 decimeter = 0.1 meter
- 1 centimeter = 0.01 meter
- 1 millimeter = 0.001 meter