

Geometric Series Sum

Formula: $\text{Sum}(i=0 \text{ to } n) a \cdot r^i = a \cdot (1 - r^{(n+1)}) / (1 - r)$

Arithmetic Series Sum

Formula: $\text{Sum}(i=1 \text{ to } n) i = n \cdot (n+1) / 2$

General AP Sum

Formula: $S = n/2 \cdot (a_1 + a_n)$

Law of Cosines

Formula: $c^2 = a^2 + b^2 - 2ab \cdot \cos(C)$

Law of Sines

Formula: $a/\sin(A) = b/\sin(B) = c/\sin(C)$

Volume of a Sphere

Formula: $V = 4/3 \cdot \pi \cdot r^3$

Surface Area of a Sphere

Formula: $A = 4 \cdot \pi \cdot r^2$

Area of a Triangle

Formula: $A = 1/2 \cdot b \cdot h$

Euler’s Formula

Formula: $e^{(i\vartheta)} = \cos(\vartheta) + i\sin(\vartheta)$

Area of a Circle

$A = \pi r^2$