High School Mathematics Reference Sheet

HSGA
High School Graduation Assessment

Pi: $\pi \approx 3.14$

FORMULAS FOR PLANE FIGURES

Parallelogram: $A = bh$

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

Trapezoid: $A = \frac{1}{2}(b_1 + b_2)h$

Circle: $C = 2\pi r$

$A = \pi r^2$

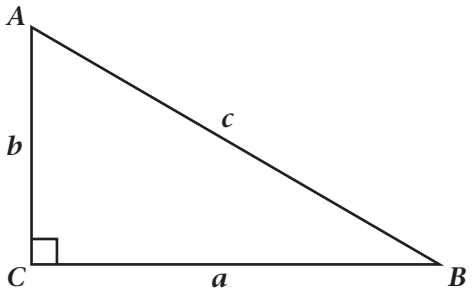
Right Triangle:

Pythagorean Theorem

$c^2 = a^2 + b^2$

Trigonometric Ratios

$\sin A = \frac{a}{c}$ $\cos A = \frac{b}{c}$ $\tan A = \frac{a}{b}$



FORMULAS FOR SOLID FIGURES

LA represents the lateral surface area.
SA represents the total surface area.
B represents the area of the base.
p represents the perimeter of the base.
l represents the slant height.

Prism: $V = Bh$
$LA = ph$

Right Cylinder: $V = \pi r^2 h$
$SA = 2\pi r^2 + 2\pi rh$

Sphere: $V = \frac{4}{3}\pi r^3$
$SA = 4\pi r^2$

Right Cone: $V = \frac{1}{3}\pi r^2 h$
$SA = \pi r(l + r)$

Regular Pyramid: $V = \frac{1}{3}Bh$
$SA = B + \frac{1}{2}pl$

NMPED
New Mexico Public Education Department