



New Jersey Student Learning Assessment - Adaptive New Jersey Graduation Proficiency Assessment - Adaptive

Mathematics Reference Sheet

High School Mathematics Assessment Reference Sheet

1 inch = 2.54 centimeters
 1 meter = 39.37 inches
 1 mile = 5280 feet
 1 mile = 1760 yards
 1 mile = 1.609 kilometers
 1 kilometer = 0.62 mile

1 pound = 16 ounces
 1 pound = 0.454 kilograms
 1 kilogram = 2.2 pounds
 1 ton = 2000 pounds

1 cup = 8 fluid ounces
 1 pint = 2 cups
 1 quart = 2 pints
 1 gallon = 4 quarts
 1 gallon = 3.785 liters
 1 liter = 0.264 gallons
 1 liter = 1000 cubic centimeters

Triangle	$A = \frac{1}{2}bh$
Parallelogram	$A = bh$
Circle	$A = \pi r^2$
Circle	$C = \pi d$ or $C = 2\pi r$
General Prisms	$V = bh$
Cylinder	$V = \pi r^2 h$
Sphere	$V = \frac{4}{3}\pi r^3$
Cone	$V = \frac{1}{3}\pi r^2 h$
Pyramid	$V = \frac{1}{3}Bh$
Radians	1 radian = $\frac{180}{\pi}$ degrees
Degrees	1 degree = $\frac{\pi}{180}$ radians
Area of a sector of a circle (degrees)	$\frac{\theta}{360}\pi r^2$
Area of a sector of a circle (radians)	$\frac{1}{2}\theta r^2$

Quadratic Formula	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
Arithmetic Sequence (Explicit)	$a_n = a_1 + (n - 1)d$
Geometric Sequence (Explicit)	$a_n = a_1 r^{(n-1)}$
General Compound Growth/Decay Formula	$A = P(1 + r)^t$
Continuous Compound Interest Formula	$A = Pe^{rt}$
Empirical Rule for a normal distribution	68%, 95%, 99.7%