

Oklahoma State Testing Program
8th Grade Mathematics Formula Sheet

UNIT CONVERSIONS

1 foot = 12 inches	1 pound = 16 ounces	1 cup = 8 fluid ounces
1 yard = 3 feet	1 ton = 2000 pounds	1 pint = 2 cups
1 mile = 5280 feet	1 kilogram = 1000 grams	1 quart = 2 pints
1 mile = 1760 yards		1 gallon = 4 quarts
1 meter = 100 centimeters		
1 meter = 1000 millimeters		

AREA

Square	$A = s^2$	Parallelogram	$A = bh$
Rectangle	$A = lw$	Circle	$A = \pi r^2$
Triangle	$A = \frac{1}{2}bh$	Trapezoid	$A = \frac{1}{2}(b_1 + b_2)h$

CIRCUMFERENCE

Circle	$C = \pi d$ or $C = 2\pi r$
--------	-----------------------------

VOLUME

Rectangular Prism	$V = Bh$ or $V = lwh$	Right Cylinder	$V = Bh$ or $V = \pi r^2 h$
-------------------	-----------------------	----------------	-----------------------------

SURFACE AREA

Rectangular Prism	$S = 2B + Ph$ or $S = 2lw + 2lh + 2wh$
Cylinder	$S = 2\pi rh + 2\pi r^2$

LINEAR EQUATIONS

Slope-intercept	$y = mx + b$	Slope formula	$m = \frac{y_2 - y_1}{x_2 - x_1}$
Point-slope	$y - y_1 = m(x - x_1)$	Direct Variation	$y = kx$

OTHER

$d = rt$	Pythagorean Theorem $a^2 + b^2 = c^2$
----------	---------------------------------------