Oklahoma State Testing Program
8th Grade Mathematics Formula Sheet

UNIT CONVERSIONS

1 foot = 12 inches

1 yard = 3 feet

1 mile = 5280 feet

1 mile = 1760 yards

1 meter = 100 centimeters

1 meter = 1000 millimeters

1 pound = 16 ounces

1 ton = 2000 pounds

1 kilogram = 1000 grams

1 cup = 8 fluid ounces

1 pint = 2 cups

1 quart = 2 pints

1 gallon = 4 quarts

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

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