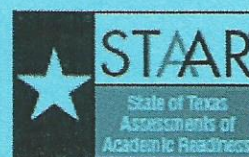


# STAAR GRADE 8 MATHEMATICS REFERENCE MATERIALS



## LINEAR EQUATIONS

Slope-intercept form  $y = mx + b$

Direct variation  $y = kx$

Slope of a line  $m = \frac{y_2 - y_1}{x_2 - x_1}$

## CIRCUMFERENCE

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

## AREA

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

Rectangle or parallelogram  $A = bh$

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

Circle  $A = \pi r^2$

## SURFACE AREA

	Lateral	Total
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Prism	$S = Ph$	$S = Ph + 2B$
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Cylinder	$S = 2\pi rh$	$S = 2\pi rh + 2\pi r^2$
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## VOLUME

Prism or cylinder  $V = Bh$

Pyramid or cone  $V = \frac{1}{3}Bh$

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

## ADDITIONAL INFORMATION

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

Simple interest  $I = Prt$

Compound interest  $A = P(1 + r)^t$