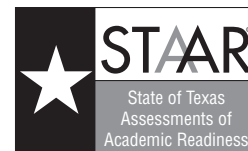


STAAR GRADE 8 MATHEMATICS REFERENCE MATERIALS



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
Prism	$S = Ph$	$S = Ph + 2B$

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