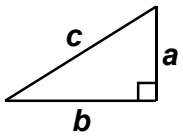
MSTAR Mathematics – Grade 8 Reference Sheet

Division of Assessment and Accountability

Formulas

RIGHT TRIANGLE

Shape	Formula
	Pythagorean Theorem $a^2 + b^2 = c^2$

EQUATIONS OF A LINE

Standard Form	Slope-Intercept Form
$Ax + By = C$ where *A* and *B* are not both zero	$y = mx + b$ where m = slope and b = y-intercept

SLOPE

Variables	Formula
Let (x_1, y_1) and (x_2, y_2) be two coordinate pairs	slope $= \frac{y_2 - y_1}{x_2 - x_1}$ where $x_2 \neq x_1$