

ELEMENTARY MATHEMATICS SPECIALIST FORMULAS

Formula	Description
$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$	Distance formula
$\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$	Midpoint formula
$m = \frac{\Delta y}{\Delta x} = \frac{y_2 - y_1}{x_2 - x_1}$	Slope
$y = mx + b$	Slope intercept form of line
$a^2 + b^2 = c^2$	Pythagorean theorem
$D = R \cdot T$	Distance
$\frac{n!}{r!(n-r)!}$	Combinations
$\frac{n!}{(n-r)!}$	Permutations