

Algebra formula sheet

Topic	Formula
Quadratic formula	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
Difference of squares	$a^2 - b^2 = (a + b)(a - b)$
Perfect square	$(a + b)^2 = a^2 + 2ab + b^2$
Slope	$m = \frac{y_2 - y_1}{x_2 - x_1}$
Slope-intercept	$y = mx + b$
Distance	$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$
Midpoint	$\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}\right)$
Compound interest	$A = P(1 + r/n)^{nt}$

Notes