

Slope intercept form of a line:  $y = mx + b$ .

Point slope form of a line:  $y - y_0 = m(x - x_0)$ .

Slope formula:  $m = \frac{\Delta y}{\Delta x}$ .

Binomial theorem.

Formula for terms of an arithmetic sequence:  $a_n = dn + c$ .

Formula for terms of a geometric sequence:  $a_n = a_1 r^{n-1}$ .

Slope of a line perpendicular to a line with slope  $m$ :  $-\frac{1}{m}$ .

Methods to calculate determinants of  $3 \times 3$  and  $2 \times 2$  matrices.

The distance formula:  $d = \sqrt{(x_1 - x_0)^2 + (y_1 - y_0)^2}$ .