**Formulae**

**Arithmetic sequences :**

$$t\_{n}=t\_{1}+\left(n-1\right)d$$

$S\_{n}=\frac{n}{2}(t\_{1}+t\_{n})$ or $S \_{n}=\frac{n}{2}(2t\_{1}+\left(n-1\right)d)$

**Geometric sequences :**

$$t\_{n}=t\_{1}.r^{n-1}$$

$S\_{n}=\frac{t\_{1}-r.t\_{n}}{1-r}$ or $S\_{n}=\frac{t\_{1}(1-r^{n})}{1-r}$

$$S\_{\infty }=\frac{t\_{1}}{1-r}$$

**Trigonometry :**

$\frac{sinA}{a}=\frac{sinB}{b}=\frac{sinC}{c}$ and $a^{2}=b^{2}+c^{2}-2b.c.cosA$

**Quadratic formula :**

$∆=b^{2}-4ac$ and $x=\frac{-b\pm \sqrt{∆}}{2a}$