**PC 20 Final Exam Formulas**

 or $S\_{n}=\frac{rt\_{n}-t\_{1}}{r-1}$ (Geometric Series)

 (Infinite Geometric series)

$t\_{n}=t\_{1}(r)^{n-1}$ (Geometric Sequence)

 OR $S\_{n}$ = $\frac{n(t\_{1}+t\_{n})}{2}$ (Arithmetic Series)

tn = t1 + d(n – 1) (Arithmetic Sequence)

a2 = b2 + c2 – 2bcCosA 

Quadratic Formula: x = $\frac{-b \pm \sqrt{b^{2}-4ac}}{2a}$

Vertex Graphing form: y = a(x-p)2 + q

Standard Form: y = ax2 + bx + c

p = $\frac{-b}{2a}$

q = c – ap2