

Millwood High School

Pre-Calculus 11 Final Exam Formulae

- $t_n = t_1 + (n-1)d$
 - $S_n = \frac{n}{2}[2t_1 + (n-1)d]$
 - $S_n = \frac{n}{2}(t_1 + t_n)$
 - $t_n = t_1 r^{n-1}$
 - $S_n = \frac{t_1(r^n - 1)}{r - 1}$
 - $S_n = \frac{rt_n - t_1}{r - 1}$
 - $S_\infty = \frac{t_1}{1 - r}$
 - If $a = b^x$ then $x = \frac{\log a}{\log b}$
 - Standard form: $f(x) = ax^2 + bx + c$
 - Vertex form: $f(x) = a(x - p)^2 + q$
 - Factored form: $f(x) = a(x - r)(x - s)$
 - $x = \frac{-b}{2a}$
 - If $ax^2 + bx + c = 0$ then $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
 - Discriminant: $b^2 - 4ac$
- π radians = 180°**
- unit circle: $x^2 + y^2 = 1$**
- ϑ (in radians) = $\frac{l}{r}$**