

PreCalculus Final Formulas

$$t_n = t_1 + (n - 1)d \quad \text{Terms of an arithmetic sequence/series}$$

$$S_n = \frac{n(t_1 + t_n)}{2} \quad \text{Sum of the first } n \text{ terms of an arithmetic series}$$

$$t_n = t_1 * r^{n-1} \quad \text{Terms of a geometric sequence/series}$$

$$S_n = \frac{t_1(1 - r^n)}{1 - r} \quad \text{Sum of the first } n \text{ terms of a geometric series}$$

$$S = \frac{t_1}{1 - r} \quad \text{Sum of an infinite geometric series}$$

$$f'(x) = \lim_{h \rightarrow 0} \frac{f(x + h) - f(x)}{h} \quad \text{Definition of the derivative of a function}$$