

# Chapter 8 Test Cheat Sheet

$$a_n = a_1 + d(n - 1)$$

$$a_n = a_1(r)^{n-1}$$

$$S_n = \frac{n}{2}(a_1 + a_n)$$

$$S_n = a_1 \left( \frac{1 - r^n}{1 - r} \right)$$

$$S_\infty = \frac{a_1}{1 - r}$$

$$d = \frac{a_j - a_i}{j - i}$$

$$r = \sqrt[j-i]{\frac{a_j}{a_i}}$$