The Test For Divergence: If or does not exist, then the series is divergent.

The Geometric Series is convergent if and its sum . This series is divergent if .  
The Harmonic series is divergent .  
The Telescoping series is convergent if and its .  
The p-series is convergent if and divergent if .  
Integral Test: Suppose is continuous, positive, decreasing function on and . Then is convergent if and only if is convergent.

Comparison Test: Suppose both series have positive terms,  
a) If is convergent and , then is also convergent.  
b) If is divergent and , then is also divergent.

Limit Comparison Test: Suppose and have positive terms. If and finite number, then either both series converge or both diverge.