Case 1: H0: μ ≤ μ0 and H1: μ > μ0 (right-tail test)

Case 2: H0: μ ≥ μ0 and H1: μ < μ0 (left-tail test)

Case 3: H0: μ = μ0 and H1: μ ≠ μ0 (double-tail test)

Test Statistic: Z = Y - μ0

σ/√n

Case 1: Reject H0 if Z ≥ zα

Case 2: Reject H0 if Z ≤ zα

Case 3: Reject H0 if |Z| ≥ zα/2