Rejection Quotient at Different Confidence Limits

Number of Observations	Q_{90}	Q_{95}	Q_{99}
3	0.941	0.970	0.994
4	0.765	0.829	0.926
5	0.642	0.710	0.821
6	0.560	0.625	0.740
7	0.507	0.568	0.680
8	0.468	0.526	0.634
9	0.437	0.493	0.598
10	0.412	0.466	0.568

$$Q = \frac{|gap|}{range}$$

If $Q > Q_{table}$ then the outlier is discarded.

Christian, Gary D. *Analytical Chemistry, 5th ed.*; John Wiley & Sons: New York, 1994; p 44.

Percent Error

$$Percent\ error = \frac{observed\ value - true\ value}{true\ value} \times 100\%$$

Percent Yield

$$Percent\ yield = \frac{actual\ yield}{theoretical\ yield} \times 100\%$$