

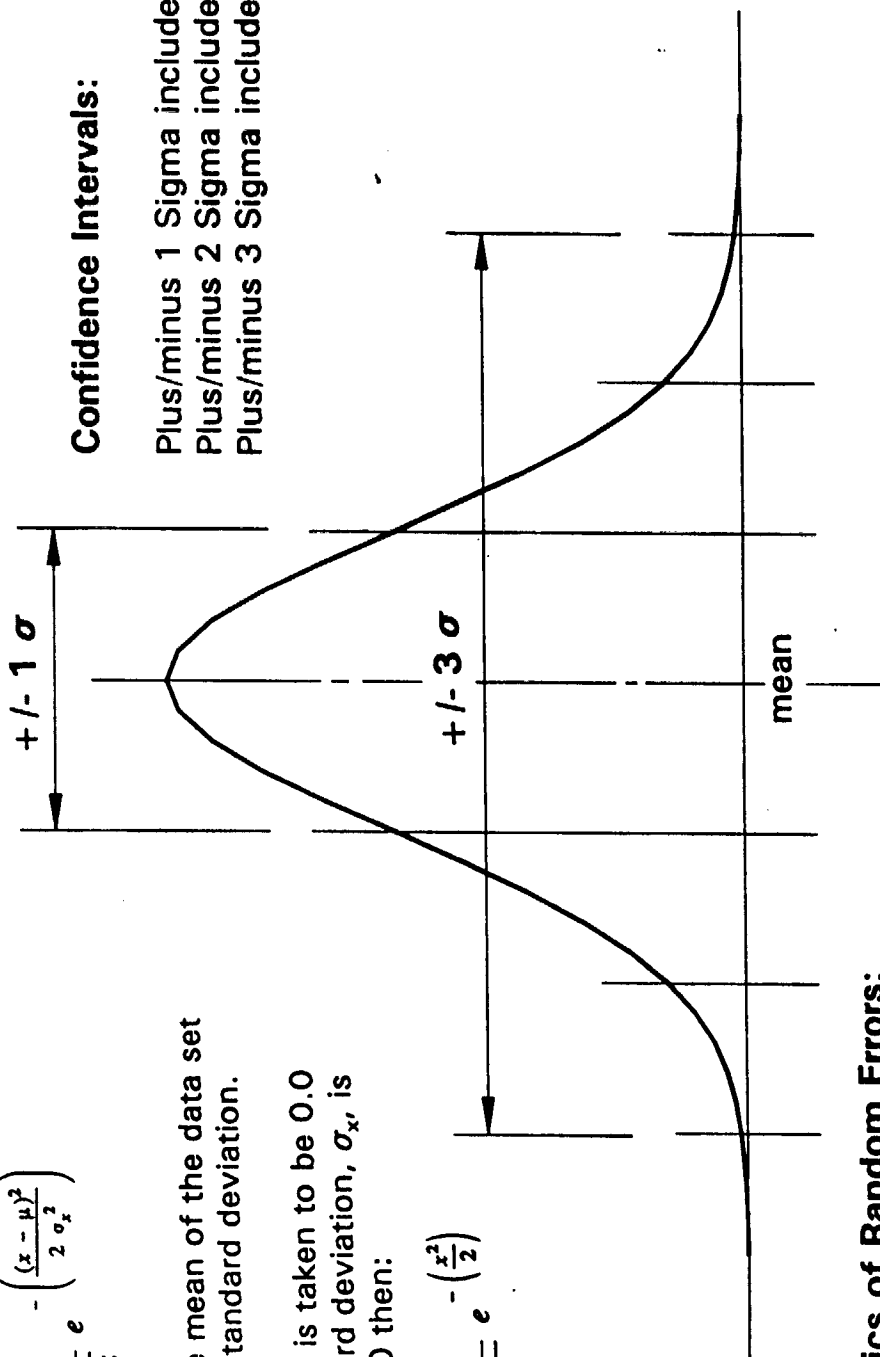
Normal Error Distribution Bell Curve

$$f(x) = \frac{1}{\sigma_x \sqrt{2\pi}} e^{-\left(\frac{(x-\mu)^2}{2\sigma_x^2}\right)}$$

Where μ = the mean of the data set
and σ_x = the standard deviation.

If the mean, μ , is taken to be 0.0
and the standard deviation, σ_x , is
taken to be 1.0 then:

$$f(x) = \frac{1}{\sqrt{2\pi}} e^{-\left(\frac{x^2}{2}\right)}$$



Confidence Intervals:

Plus/minus 1 Sigma includes 68% of area.
Plus/minus 2 Sigma includes 95% of area.
Plus/minus 3 Sigma includes 99.7% of area.

Characteristics of Random Errors:

1. Small error occur more frequently than large ones.
2. Postive errors and negative errors occur with the same frequency.
3. Very large errors do not occur. Rather, they are counted as blunders.

EARL F. BURKHOLDER, PLS, PE
Consulting Geodetic Engineer

P.O. Box 13240
Circleville, Ohio 43113-7240
(614) 477-6261

Drawn By: Earl F. Burkholder

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