Quantitative X-ray microanalysis

$$\frac{C_i}{C_{(i)}} = \frac{I_i}{I_{(i)}}$$

C_i = consentration of element i in the sample

$C_{(i)}$ = " " " " standard

I_i = measured intensity in the sample

$I_{(i)}$ = " " " " standard

if the ~~consentration~~ standard is pure element i, then

$$C_i = \frac{I_i}{I_{(i)}}$$

$$C_i = (ZAF)_i \cdot \frac{I_i}{I_{(i)}}$$

$$(ZAF)_i = Z_i \cdot A_i \cdot F_i$$

A = the absorption factor

Z = the atomic number factor

F = the fluorescence correction