Formulas for Single Phase		
	Circular Mil method	Resistance per 1000 ft. method
To calculate Voltage Drop	$VD = \frac{2 \times K \times I \times L}{cmil}$	$VD = \frac{2 \times L \times R \times I}{1000}$
To determine conductor size	$cmil = \frac{2 \times K \times I \times L}{VD}$	$R = \frac{VD \times 1000}{2 \times L \times I}$
To calculate length of conductor	$L = \frac{cmil \times VD}{2 \times K \times I}$	$L = \frac{VD \times 1000}{2 \times R \times I}$
To calculate current	$I = \frac{cmil \times VD}{2 \times K \times L}$	$I = \frac{VD \times 1000}{2 \times R \times L}$

Formulas for Three Phase		
	Circular Mil method	Resistance per 1000 ft. method
To calculate voltage drop	$VD = \frac{1.732 \times K \times I \times L}{cmil}$	$VD = \frac{1.732 \times L \times R \times I}{1000}$
To determine conductor size	$cmil = \frac{1.732 \times K \times I \times L}{VD}$	$R = \frac{VD \times 1000}{1.732 \times L \times I}$
To calculate length of conductor	$L = \frac{cmil \times VD}{1.732 \times K \times I}$	$L = \frac{VD \times 1000}{1.732 \times R \times I}$
To calculate current	$I = \frac{cmil \times VD}{1.732 \times K \times L}$	$I = \frac{VD \times 1000}{1.732 \times R \times L}$