CUMULATIVE VOTING FORMULAS

if X = Number of **Shares to Elect** a Specific Number of Directors
S = Total Number of Shares Voted at Meeting
N = Total Number of Directors to be Elected
D = Number of Directors Want to (or Can) Elect

$$\mathbf{X} > \frac{\mathbf{S * D}}{\mathbf{N + 1}}$$

$$\mathbf{D} < \frac{\mathbf{X * (N + 1)}}{\mathbf{S}}$$

Examples:
S = 100 shares voted at meeting
N = 5 directors to be elected

a. If Jones owns **49 shares**, how many directors can he elect?

D < [49*(5 +1)]/100 = [(49 x 6)]/100 = 294/100 = 2.94
D < 2.94

==> Jones can elect **two directors** (largest number of whole directors **less than** 2.94).

b. If Jones wishes to elect **one director**, what is the minimum number of shares s/he needs?

X > (100 x 1)/(5 + 1) = 100/6 = 16.666...
X > 16.666...

==> Jones needs **17** shares (smallest number of whole shares **greater than** 16.666...).

c. Suppose only **3** directors were to be elected, & Jones wanted to elect **one**?

X > (100 x 1)/(3 + 1) = 100/4 = 25
X > 25

==> Jones needs **26** shares (smallest number of whole shares **greater than** 25).