# CAPM Formula Sheet

## Float (Chapter 6):

**Total Float =**
**LS - ES or LF - EF**

**Free Float =**
**ES (Successor) – [EF (Predecessor) + 1]**

## Beta Expected Value (Chapters 6 and 7):

**(o + p + (4 x m)) / 6**

**Standard Deviation = (p - o) / 6**
**1 Standard Deviation ≈ 68.26%**
**2 Standard Deviations ≈ 95.44%**
**3 Standard Deviations ≈ 99.73%**

## Triangular Expected Value (Chapters 6 and 7):

**(o + p + m) / 3**

**Where:**
**o = optimistic estimate**
**p = pessimistic estimate**
**m = most likely estimate**

## Earned Value Formulas (Chapter 7):

**SV = ES - AT**
**CV = EV - AC**
**SPI = ES/AT**
**CPI = EV/AC**
**VAC = BAC - EAC**

## Forecasting Formulas (Chapter 7):

**EAC = AC + bottom-up Estimate to Complete**
**EAC = (AC + BAC) – EV *changes not permanent***
**EAC = BAC / (CPI) *changes permanent***
**EAC = AC + [(BAC – EV) / (CPI x SPI)]**

**TCPI** using BAC = **(BAC – EV) / (BAC – AC) *BAC valid***
**TCPI** using EAC = **(BAC – EV) / (EAC – AC) *BAC invalid***

## Cost Range (Chapter 7):

| Estimate | Tolerance Range |
|---|---|
| ROM | -25% to +75% |
| Budget | -10% to +25% |
| Definitive | -5% to +10% |