The number of relationship pairs in a team = **[n * (n-1)] / 2**

CV = EV-AC Positive is Good (means Costs are Under Budget), Negative is Bad (means Costs are Over Budget), and CV = 0 means exactly on budget.

CPI = EV / AC Greater than 1 is Good, (means cots are Under Budget), Less than 1 is Bad (means Costs are Over Budget), and CPI = 1 means exactly on budget.

SV = EV-PV Positive is Good (means Project is Ahead of Schedule), Negative is Bad (means Project is Behind Schedule); and SV = 0 means On Schedule.

SPI = EV / PV Greater than 1 is Good, (means Project is Ahead of Schedule), Less than 1 is Bad (means Project is Behind Schedule); and SPI = 1 means On Schedule.

If variances are typical (expected to continue), then: **EAC = BAC / CPI**

Process Groups overlap, and **"Phases"** are non-overlapping and/or have discrete deliverables.

Functional Organizations are stable, have clear career paths with a clear chain of command.

Projectized Organizations are focused on projects and have PMs with ultimate authority

Estimated Standard Deviation (Sigma) is **one sixth of the range** (maximum -minimum value)
The area within **1** Standard Deviation of the Mean accounts for **68%** of the data points.
The area within **2** Standard Deviations of the Mean accounts for **95%** of the data points.
The area within **3** Standard Deviations of the Mean accounts for **99%** of the data points.

The **Triple Constraints** are **Scope**, **Time**, and **Cost**

Future Value (FV) = Principal (P) times (1 + Interest Rate), FV = P * (1+i)
Present Value (PV) = Future Value (FV) divided by (1 + Discount Rate), PV = FV / (1+i)
Net Present Value (NPV) = Present Value (PV) of Inflows minus the Initial Investment

Invest in ALL opportunities with I.R.R. higher than cost of borrowing. Higher IRR is better.
Invest in ALL opportunities with a positive NPV. Higher NPV is better.
Simple PAYBACK calculations do not reflect the Time Value of Money.

Rule of five, six, or seven suggests we "**investigate**" following 5, 6, or 7 consecutive readings on the same side of the centerline (X-bar) on a Control Chart.

WBS is a deliverables-oriented structure and the primary input to Developing the Activity List.

Sellers assume risk in **Fixed Price** contracts; Buyers assume risk in **Time & Materials** contracts.

PERT (Weighted Average) Estimates = [Optimistic + (Most Likely * 4) + Pessimistic] / 6,

PDM = AON and can display **only one time estimate** per activity on the network diagram.
ADM = AOA and can display **more than one time estimate** per activity on the network diagram.

When compressing schedules, **Crashing** always adds cost and **Fast-Tracking** always adds risk.

To calculate the Critical Path, two passes (one forward and one backward) are required.

Critical Chain Method scheduling involves recalculating the Critical Path based on resources.

Theory "X" managers are like dictators, and **Theory "Y"** managers are like coaches.

Stages of Team Development are: **Forming**, **Storming**, **Norming**, and **Performing**.

Conflict Resolution Options are: **Forcing**, **Smoothing**, **Compromise**, **Confrontation**, & **Withdrawal**.

Quality Assurance focus is Analysis/Evaluation, **Quality Control** focus is Collection/Feedback.

Change Management focus is on **process**, **Configuration Management** focus is on **product**.

Types of Project Endings are: **Addition**, **Starvation**, **Integration**, and **Extinction** (best)

(Free) **Float** or (Free) **Slack** = Late Start minus Early Start or Late Finish minus Early Finish

Negative Risk Strategies: **Avoid**, **Transfer**, **Mitigate**, or **Accept** (passive or w/contingency)
Positive Risks Strategies: **Exploit**, **Share**, **Enhance**, or **Accept** (passive or w/contingency)