

# PERT

Calculations for each task

Term	Formula Used
PERT Value (expected duration)	$\frac{(\text{Pessimistic} + 4 * (\text{Most Likely}) + \text{Optimistic})}{6}$
Standard Deviation (Sigma)	$\frac{\text{Pessimistic} - \text{Optimistic}}{6}$
Variance	$(\text{Standard Deviation})^2$

# PERT

Calculations for the project

Term	Formula Used
PERT Value	Sum of PERT values of individual tasks
Standard Deviation	It is not correct to add standard deviations. Thus, use sum of variances of all the tasks
Variance	Sum of variances of all the tasks

*To find duration and standard deviation for a project, you add PERT estimates for each activity on the critical path.*

*Since you cannot add standard deviations, you must calculate variance, add the variances, and take the square root to obtain the project standard deviation.*