

VUT Equation Calculations for General Distributions

Inputs				
Interarrival Time		Processing Time		No. of Servers (m)
Mean (a)	Std. Dev. (σ_a)	Mean (p)	Std. Dev. (σ_p)	
30.0000	30.0000	24.9000	17.6070	1

Outputs				
Coefficient of Variability (Relative Variability)	of Arrivals	This Preview excludes the variable outputs in this column	1.0000	
	of Service		0.7071	
Input Rate			0.0333	
Aggregate Service Rate			0.0402	
Long-term Avg. Utilization			0.8300	
Variability Effect*			0.7500	
Utilization Effect*			4.8824	
Avg. processing time			24.9000	
Avg. Queue Time			91.1779	
Average Flow Time			116.0779	
<i>Using Little's Law</i>				
Average Queue Length		3.0393		
Average in-process Inv.		0.8300		
Total Average Inventory		3.8693		

*(see VUT equation)

To use: enter system information in the yellow boxes in row 7.

System average expected values are calculated and displayed in green boxes.

