



DEFENSE ACQUISITION UNIVERSITY EMPLOYEE SELF-ASSESSMENT

CMQ 230 - Quality Control Graphics and Charting

Note:

- Provide a justification(s) package referencing the numbered outcomes as appropriate on separate paper.
- Only the numbered outcomes (bold font) need to be addressed.
- The enablers (indented if specified) are provided to ensure the outcome is sufficiently addressed.
- The **Achieved** column is for use by the initial (functional) evaluator.
- Attach this guide with the justification to the DD form 2518 for a complete package.

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Outcomes and Enablers		Achieved?	
		Yes	No
1	Given sample quality control graphics data, recognize the concepts and use of quality control graphics.		
	Given sample quality control graphics data, recognize the concepts and use of quality control graphics.		
	Recall attribute and variable data used in quality control graphics.		
	Define the purpose of constant sample sizes and variable sample sizes.		
	Recognize the difference between statistical and non-statistical sampling.		
	Recognize the principles of the Central Limit Theorem (CLT).		
	Recognize the principles of rational subgroups.		
2	Given sample attribute and variable quality control graphics, identify the characteristics of and tools used to illustrate attribute and variable data.		
	Recognize the purpose for using check sheets, checklists, and logs.		
	Identify the correct method of constructing check sheets, checklists, and logs.		
	Recognize the different types of quality control graphics.		
	Identify the reasons for using the various types of quality control graphics.		
	Recognize the correct methods of constructing flowcharts, Pareto charts, pie charts, histograms, cause and effect (fishbone) diagrams, scatter diagrams, and run charts.		
	Select the appropriate quality control graphic for monitoring or analyzing a process, given a scenario.		
3	Given a scenario including sample data and a simulated work environment, choose the steps to construct quality control graphics and supporting data sheets.		
	Identify the situations when to use check sheets, checklists, and logs.		
	Choose the steps needed to construct check sheets, checklists, and logs.		
	Choose the steps needed to construct a flowchart.		
	Choose the steps needed to construct a Pareto chart.		
	Choose the steps needed to construct a pie chart		
	Choose the steps needed to construct a histogram.		
	Choose the steps needed to construct a cause and effect (fishbone) diagram.		
	Choose the steps needed to construct a scatter diagram.		
	Choose the steps needed to construct a run chart.		
4	Given data and scenarios, recognize how Statistical Process Control (SPC) relates to the Quality Assurance (QA) process.		
	Identify SPC as it relates to quality control charts used in QA.		
	Identify the purpose of 3 Sigma and 6 Sigma.		
	Recognize the differences between 3 Sigma and 6 Sigma.		
	Recognize the purpose of quality control graphics in SPC.		
	Identify the different uses of control limits and specification limits.		
	Recognize construction control limits for p, np, c, and u attribute charts.		
	Recognize construction control limits for X-Bar and R, X-Bar and s, and X-Bar and MR variable charts.		
	Identify quality control graphics patterns, including runs, hugging, and trends.		
	Recognize the use rules for determining statistical control to distinguish between common-cause and special-cause variation.		
	Recognize the concepts of process capability (Cp) and process capability index (Cpk).		
	Recognize the concept of pre-control.		