

## Re: need help with finding probability

**Source:** <http://sci.tech-archive.net/Archive/sci.stat.edu/2005-03/0073.html>

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**Date:** 03/18/05

Date: 18 Mar 2005 18:27:14 GMT

"shanky" <[shankardasm@gmail.com](mailto:shankardasm@gmail.com)> wrote in news:1111093507.292151.232300@o13g2000cwo.googlegroups.com:

> *The problem i have is there are two rules to pass a chemical batch:*  
>  
>  
> *1) take 6 samples and check whether they are within limits. if yes*  
> *then pass the batch else go to level 2.*  
>  
>  
> *2) take 6 more samples and find mean of the 12 and check whether it is*  
>  
> *within limits, also check whether each reading is within 0.9LSL and*  
> *1.1USL. IF yes then pass the batch*  
> *LSL=LOWER SPECIFICATION LIMIT*  
> *USL=UPPER SPECIFICATION LIMIT.*  
>  
>  
> *All the samples are generated using random numbers for a normal*  
> *distribution.*  
>  
>  
> *I have different means and standard deviations for which i have to*  
> *generate the readings. I did write the macro for them and got the*  
> *results.*  
>  
>  
> *MY QUESTION:*  
> *How to find or estimate to within 1% accuracy the probability that a*  
> *batch with mean and std deviation will pass the given specifications of*  
> *LSL and USL.*

Search for "tolerance intervals."