

1. A new cola company has copied the taste of Pepsi. Before they go to market with their product they want to be sure that their product tastes just a bit sweeter than Pepsi. So they have an expert judge help them decide just how much additional sugar to add to the recipe so that a trained taster will be able to reliably say that the new drink is just sweeter than Pepsi

Comparison Stimuli					
	STD				
Judgment	20	25	30	35	40
f(Greater)	1	5	7	8	9
f(Less)					
Total	10	10	10	10	10
p(+)					
z(+)					
z'(+)					
p'(+)					
	slope		y-incpt		
Lower Limen					
Upper Limen					
PSE Estimate					
jnd					

- | |
|----------------------|
| 1. Interpret the PSE |
| 2. Interpret the JND |

2. A medical technician is being trained to spot abnormal mammograms for evidence of breast cancer. As part of her final exam she is asked to review 100 past mammograms and make a decision about whether the patient needs an expensive biopsy procedure. For these cases biopsies have already been performed and truth is known about the actual presents of cancer.

	No Cancer	Cancer	Total
Trainee says biopsy	5	13	18
Trainee says clear	75	7	82
Total	80	20	100

Calculate for this subject d' and β and describe what those measures tell you about the evidence that this technician is ready for fieldwork. Show the results of calculations in the table provided and use the space below to describe your interpretation of d' and β .

	Probability	z-score	f(z)	d'	c	β
Correct Detections						
False Alarms				XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX

1. Interpret the d'
2. Interpret the β
3. Do you want this trainee in the field?