

MCS D Tone Lab

A subject was presented with a series of tones in a MCS D procedure and asked to judge if each tone was higher or lower than the standard tone (400 hz.). Calculate for this subject their PSE and JND and describe what those measures tell you about how this subject can discriminate tones in this frequency range. Show the results of calculations in the table provided below and use the space below to describe your interpretation of the PSE and the JND.

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

Comparison Stimuli					
	STD				
Judgment	436	438	440	442	444
f(Greater)					
f(Less)					
Total	10	10	10	10	10
p(+)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
z(+)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	slope	y-incpt			
Lower Limen	<input type="text"/>	<input type="text"/>			
Upper Limen	<input type="text"/>	<input type="text"/>			
PSE Estimate	<input type="text"/>	<input type="text"/>			
jnd	<input type="text"/>	<input type="text"/>			

Using the provided graphs on page 2, plot your probabilities on the Psychometric function plot (Figure 1) and then estimate an ogive curve that fits those points. Next, plot your regression line on the z transformed psychometric function plot (Figure 2). Indicate on Figures 1 and 2 the PSE and JND

Figure 1

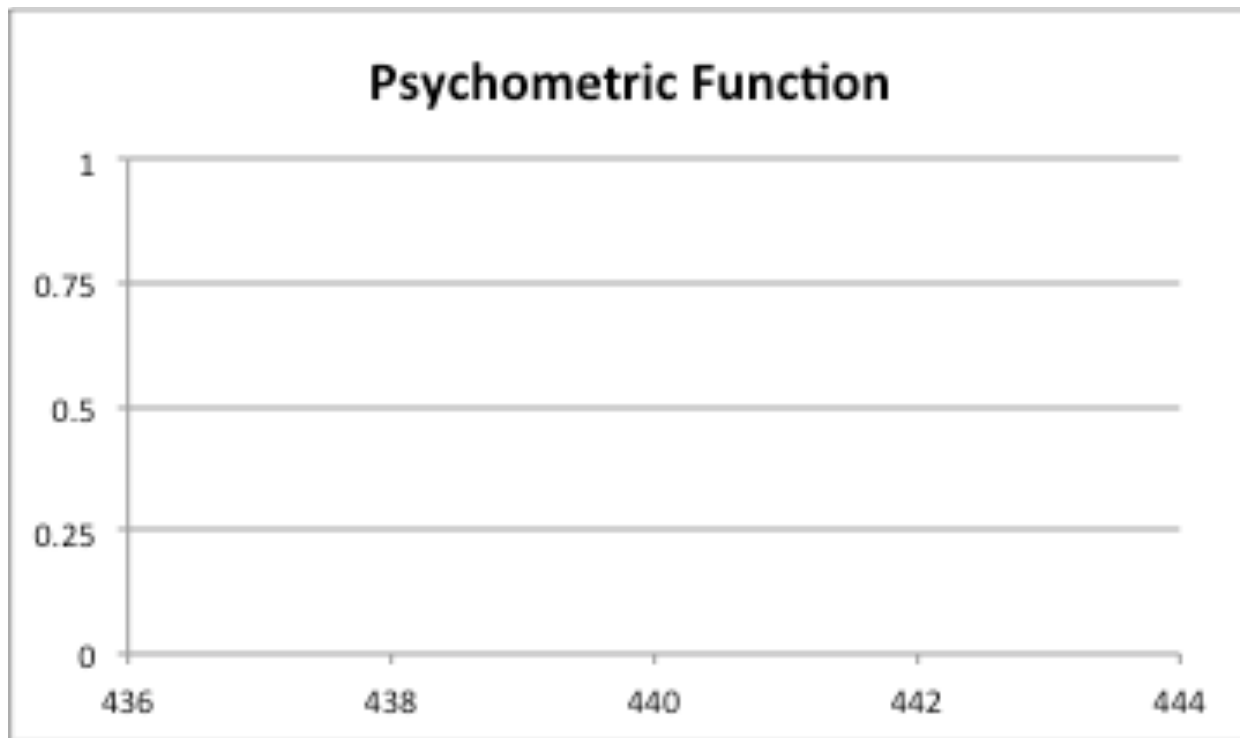
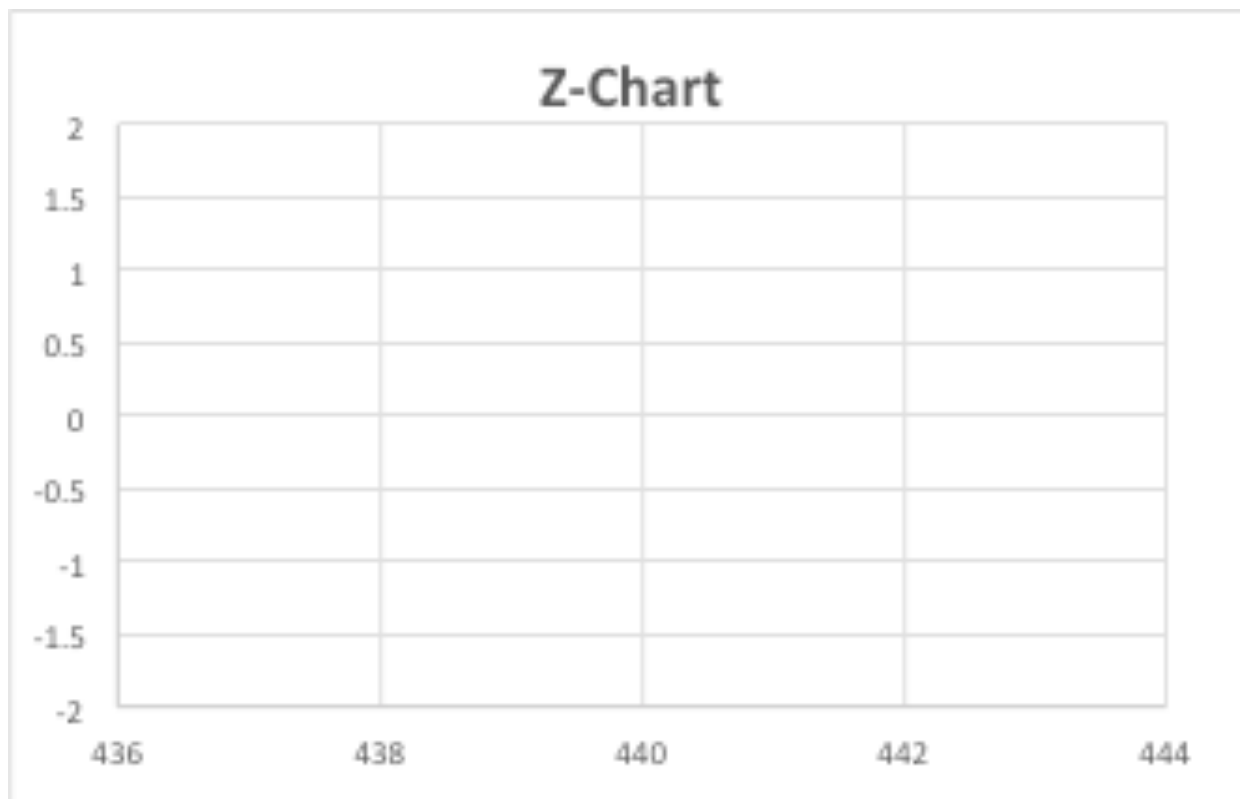


Figure 2



Next calculate the PSE and JND when the subject is discriminating tones in the 200 hz. frequency range.

<i>Comparison Stimuli</i>					
	<i>STD</i>				
<i>Judgment</i>	<i>196</i>	<i>198</i>	<i>200</i>	<i>202</i>	<i>204</i>
<i>f(Greater)</i>					
<i>f(Less)</i>					
<i>Total</i>	10	10	10	10	10
<i>p(+)</i>					
<i>z(+)</i>					
	slope	y-incpt			
<i>Lower Limen</i>					
<i>Upper Limen</i>					
<i>PSE Estimate</i>					
<i>jnd</i>					

Now compare the JNDs from the two frequency hz. ranges. What does the data suggest?

3. Compare the JNDs