

The following data are observations of time (in days) from remission induction to relapse for 50 patients with acute nonlymphoblastic leukemia.

24	46	57	57	64	65	82	89	90	90	111	117
128	143	148	152	166	171	186	191	197	209	223	230
247	249	254	258	264	269	270	273	284	294	304	304
332	31	393	395	487	516	518	518	534	608	642	697
1160	955										

- Using 0 (zero) as a starting point and a class width of 200, use EXCEL to construct a frequency distribution and a relative frequency distribution.
- Use EXCEL to construct a histogram, a relative frequency histogram, a frequency polygon, and a pie chart.
- Characterize the distribution shape by selecting the name of the distribution that most closely approximates the data.
- What is the percentage of observations from which the time to relapse was more than 399 days?

Step 1: Input data into Column A.

Step 2: Input upper class limits into Column C.

Step 3: **Tools → Data Analysis → Histogram**

Step 4: Input the correct information for your data. Input range should be A1:A_____

Bin Range should be C1:C_____.

Check Output range.

Output Range should be E1:E_____.

Click OK.

Step 5: You should now see the frequency distribution on your screen. Before you go any further save everything to your disk.

Step 6: Highlight the columns needed for a histogram. Click on Chart Wizard. Click on Column. Next. Remember here you have to make some changes. The data range should be the frequency column only. Click on Series Tab. The X-axis should be your Upper Class limits. Next. Name your histogram with your name and label your axes appropriately. Click Finish. Adjust your histogram as needed for size. Now you need to get rid of the gap between the bars. Click on one of the bars. Click on the Options Tab. Change Gap to zero. Click Ok. You should now see a histogram on your screen.

Step 7. Follow the same steps as above for the relative frequency distribution.

Step 8. To do a frequency polygon, first add a beginning row and ending row of zeros to your frequency polygon. Highlight the appropriate columns. Click on Chart Wizard → Line Graph. Again change the data range to the frequency column only and the X-axis to

the Upper Class limits. Name the Frequency Polygon with your name. Label the axes appropriately. Finish. You should now see a frequency polygon on your screen.
Step 9. To do a pie chart, highlight the appropriate columns. Chart Wizard → Pie Chart. Label the graph. Finish.

You now have everything you need from the computer. Save everything. Get a print out. Answer questions.

Turn in lab with a cover sheet. Lab is due Wednesday, March 18 (MW class) or Thursday, March 19 (TTH class).