STATISTICS HANDOUT
(GRAPHING)

1. The Jones family has a budget. Each month it uses its income in the following manner: 30% for food, 25% for rent, 20% for transportation, 10% for savings, 5% for entertainment, and 10% for unexpected expenses. Construct a pie graph representing this information.

2. Each dollar that the government obtains in taxes is spent in the following manner: 25 cents goes to defense, 30 cents goes to social security, 10 cents goes to farm subsidies, 15 cents goes to government salaries, and 20 cents is spent on miscellaneous social programs. Construct a circle graph representing this information.

3. In 1988 UNLV received received the indicated amount of revenue from the following sources:

Federal aid:	$600,000
State aid:	700,000
Private Donations	100,000
Corporate Donations	200,000
Student Tuition:	300,000
Other:	100,000

   Construct a pie graph representing this information.

4. There are 20,000 students attending a certain college. The classes are distributed in the following manner: 4,000 seniors, 3,000 juniors, 5,000 sophomores, 6,000 freshmen, and 2,000 graduate students. Construct a circle graph representing this information.

5. A statistics experiment consists of tossing a group of 8 fair coins and recording the number of heads. Construct a histogram and a frequency polygon for the thirty tosses listed below.

   6, 1, 8, 3, 6, 7, 5, 4, 5, 3, 3, 3, 7, 8, 2, 5, 2, 8, 4, 5, 4, 6, 5, 4, 1, 2, 2, 4, 6, 1

6. A student in a math class recorded the number of doughnuts purchased by the first 30 customers in Al's doughnut shop. Construct a histogram and a frequency polygon for this data.

   2, 3, 10, 1, 4, 5, 6, 7, 9, 8, 3, 6, 3, 2, 4, 2, 5, 10, 2, 6, 2, 8, 1, 8, 8, 7, 7, 6, 5, 6

7. The following were test scores for 33 students in a math 114 class.

58, 92, 85, 66, 72, 81, 60, 90, 70, 71, 77, 84, 75, 58, 89, 67, 98, 96, 70, 87, 74, 64, 64, 59, 87, 73, 91, 63, 86, 81, 72, 72, 73

   a. Construct a grouped frequency distribution for these scores using the intervals 95-99, 90-94, 85-89, and so on.

   b. Use the frequency distribution from part (a) to construct a histogram, a frequency polygon, and a cumulative frequency graph

8. A survey of 32 college students was made to determine the number of books purchased for their classes in the fall semester. Construct a frequency distribution, a frequency polygon, and a cumulative frequency graph using this data.

8, 7, 14, 7, 8, 10, 16, 8, 9, 15, 14, 16, 10, 14, 8, 14, 13, 8, 13, 8, 13, 8, 12, 11, 9, 12, 13, 12, 12, 7, 15, 14

9. The scores on a math test of 40 grade school students are as follows:

62, 65, 94, 85, 90, 43, 73, 87, 74, 42, 62, 61, 83, 68, 84, 90, 66, 71, 63, 84, 84, 76, 96, 47, 53, 78, 53, 64, 68, 58, 46, 58, 58, 86, 84, 53, 87, 77, 75, 62

   a. Construct a grouped frequency distribution for these grades using the intervals 95-99, 90-94, 85-89, and so on.

   b. Using the frequency distribution from part (a), construct a frequency polygon and a cumulative frequency graph.

10. The heights of 40 high school students (in inches) are given as follows:

62, 65, 54, 55, 50, 73, 73, 57, 64, 52, 62, 61, 53, 68, 64, 70, 66, 71, 63, 54, 64, 66, 56, 57, 63, 68, 53, 64, 68, 58, 66, 58, 58, 56, 64, 53, 67, 67, 70, 62

   a. Construct a grouped frequency distribution for these heights using the intervals 72-75, 69-71, 66-68, and so on.

   b. Using the frequency distribution from part (a), construct a frequency polygon and a cumulative frequency graph.