1. Students made the following scores on a test: (Note: Copy these carefully!)

| 87 | 66 | 87 | 81 | 96 | 65 | 90 | 85 | 86 | 92 | 93 | 79 | 94 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 74 | 86 | 97 | 64 | 93 | 75 | 88 | 77 | 85 | 63 | 72 | 73 |  | a. Make a frequency distribution by grouping the scores into intervals of $60 \leq \mathrm{s}<65$, etc. b. Make a histogram and frequency polygon for the frequency distribution.

2. During a certain week in the winter, the following minimum temperatures were recorded in an eastern city: $20,28,24,28,40,39,31$. Find the following: a. median b. standard deviation

## 3. Refer to Page 807 in your book. Do Problem 42, Parts a., b., and c.

4. A normal distribution consists of 1000 scores with a mean of 100 and a standard deviation of 10 . About how many of the scores are: a. below 90 b. between 80 and 90 ?
5. The test scores for 2000 students were normally distributed with a mean of 65 and a standard deviation of 5 . Find the following:
a. The z -score corresponding to the test score of 70 .
b. The probability that a tested student will have a score between 65 and 70 .
6. The Easy Loan Company charges $28 \%$ simple interest (annual) for a 2 -year, $\$ 600$ loan. Find: a. The total interest on this loan. b. The total interest for three months. c. The total amount to be paid to the loan company at the end of two years.
7. A credit card holder is obligated to pay his balance in full if it is less than $\$ 10$. Otherwise, the minimum payment is $\$ 10$ or $5 \%$ of the balance, whichever is more. Suppose that a customer received a statement listing the balance as $\$ 292.75$.
a. Find the minimum payment due.
b. The finance charge is $1.5 \%$ per month. What will be the amount of this charge on the next monthly statement if the customer makes only the minimum payment?
8. A car costing $\$ 8500$ can be bought with $\$ 1500$ down and $10 \%$ add-on interest to be paid in 48 equal installments.
a. What is the total interest charge?
b. What is the monthly payment?

Extra Credit. A typical family budget is as follows: Savings: $\$ 250$; Housing: $\$ 450$ Clothing: $\$ 250$; Food: $\$ 750$; Other: $\$ 300$. Therefore, the total budget is $\$ 2000$. Make a circle graph for this budget.

