## Chapter 4: Practice Computational Problems

1. From the following 10 scores, compute a) the mean, b) the median, and c) the mode.

| 23 | 39 | 48 | 72 | 36 | 39 | 54 | 98 | 64 | 38 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

2. A social psychologist administered anxiety questionnaires to a group of patients beginning
a therapy program. Using this data, compute the (a) mean, (b) the median, and (c) the mode.

| 50 | 52 | 51 | 60 | 68 | 63 | 61 | 49 | 52 | 59 | 55 | 60 | 53 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

3. An industrial organizational psychologist recorded the number of sick days used by each employee over the past year. Using this data, compute a) the mean, b) the median, c) the mode, and d) determine if the distribution is skewed. If so, identify the skew and explain which measure of central tendency is best to use.

| 16 | 9 | 6 | 5 | 5 | 4 | 2 | 1 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 10 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 1 |
| 9 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 1 |
| 9 | 6 | 5 | 5 | 4 | 3 | 2 | 1 |  |
|  |  |  |  |  |  |  |  |  |

4. The exam scores for Class A are shown below. Compute a) the mean, b) the median, and c) the mode for the distribution of exam scores.

| 100 | 98 | 98 | 98 | 97 | 95 | 93 | 92 | 92 | 91 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 90 | 90 | 89 | 88 | 88 | 88 | 85 | 83 | 80 | 80 |
| 79 | 78 | 78 | 78 | 77 | 76 | 75 | 73 | 72 | 72 |

5. A team of researchers observed and recorded the number of infractions of prison rules for 20 prison inmates over a 12 -month period. Compute a) the mean, b) the median, and c) the mode.

| 16 | 14 | 14 | 10 | 8 | 8 | 8 | 8 | 5 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 1 | 1 |

6. A researcher conducted a survey and asked participants the number of hours they exercised on average the previous six weeks. $\bar{X}=10$ hours, Median $=4$ hours, and Mode $=2$ hours. What is the shape of this distribution and the best measure of central tendency?
7. Researchers asked participants in a small town to choose their favorite restaurant. The results of the data collection are shown below. What is the mode?

| Restaurant | $f$ |
| :--- | :---: |
| Tastee Time | 25 |
| Dads \& Daughters | 22 |
| Pizza Palace | 47 |
| Foster Family Inn | 19 |
| Delicious Delight | 11 |

8. A group of researchers investigated the generosity of employees at The Nice Place Corporation. The data shown below reflect the money employees contribute to charity each month. Compute the mean.

| Dollars <br> Donated | $f$ |
| :---: | :---: |
| 25 | 3 |
| 24 | 3 |
| 23 | 5 |
| 22 | 10 |
| 20 | 15 |
| 19 | 6 |
| 15 | 5 |
| 10 | 3 |

