

48

Unit 8: Statistics  
POST TEST – Version B

Find the Minimum, Maximum, Range, Mean, Median, and Mode for each data set. (6pts each)

1.

**Hits in a Round of Hacky Sack**

|    |    |    |    |    |    |
|----|----|----|----|----|----|
| 5  | 10 | 8  | 12 | 10 | 8  |
| 12 | 5  | 7  | 8  | 22 | 12 |
| 6  | 8  | 20 | 1  |    |    |

1, 5, 5, 6, 7, 8, 8, 8, 8, 10, 10, 12, 12, 12, 20, 22

| Minimum | Maximum | Range | Mean | Median | Mode |
|---------|---------|-------|------|--------|------|
| 1       | 22      | 21    | 9.63 | 8      | 8    |

2.

**Test Scores**

|    |    |    |    |    |    |
|----|----|----|----|----|----|
| 36 | 57 | 40 | 49 | 53 | 53 |
| 50 | 49 | 52 | 45 | 48 | 47 |
| 54 | 53 | 48 | 49 | 48 | 54 |
| 42 | 54 | 54 | 50 |    |    |

36, 40, 42, 45, 47, 48, 48, 48, 49, 49, 49, 50, 50, 52, 53, 53, 53, 54, 54, 54, 54, 57

| Minimum | Maximum | Range | Mean  | Median | Mode |
|---------|---------|-------|-------|--------|------|
| 36      | 57      | 21    | 49.32 | 49.5   | 54   |

Draw a dot plot for each data set. (4 pts each)

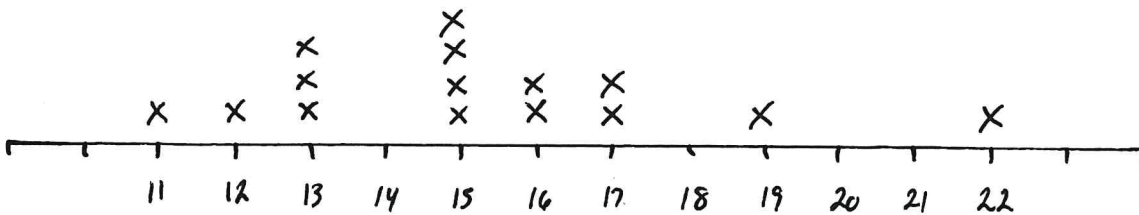
3.

Age at First Job

|    |    |    |    |    |    |
|----|----|----|----|----|----|
| 13 | 15 | 17 | 17 | 16 | 13 |
| 15 | 11 | 15 | 22 | 16 | 19 |
| 13 | 12 | 15 |    |    |    |

11, 12, 13, 13, 13, 15, 15, 15, 15, 16, 16, 17, 17, 19, 22

↑ min      Range =  $22 - 11 = 11$       ↑ max



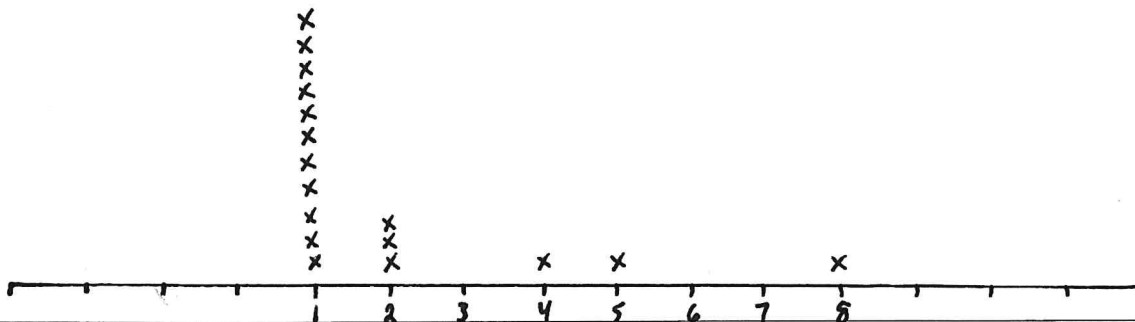
4.

Basketball Tournament Champions

| School         | Time Won | School         | Time Won |
|----------------|----------|----------------|----------|
| Stanford       | 1        | Michigan State | 2        |
| Marquette      | 1        | Arizona        | 1        |
| Michigan       | 1        | Loyola-Chicago | 1        |
| North Carolina | 2        | Kentucky       | 8        |
| Georgetown     | 1        | Villanova      | 1        |
| Wyoming        | 1        | Duke           | 5        |
| California     | 1        | San Francisco  | 2        |
| Ohio State     | 1        | Connecticut    | 4        |
| Oregon         | 1        |                |          |

1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 2, 2, 2, 4, 5, 8

↑ min      Range =  $8 - 1 = 7$       ↑ max



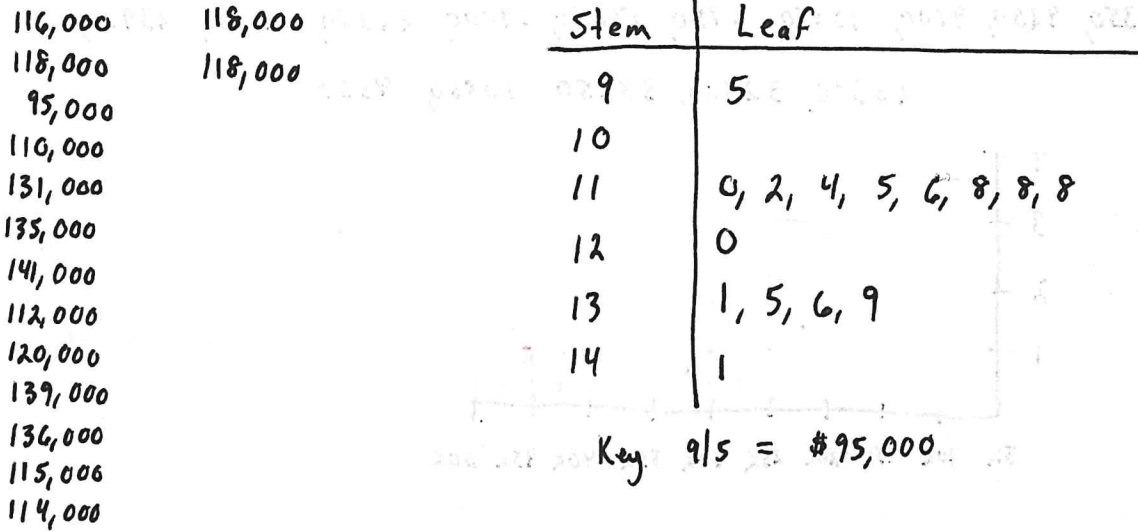
Draw a stem-and-leaf plot for each data set.

(3 pts each)

5.

Single Family Home Prices

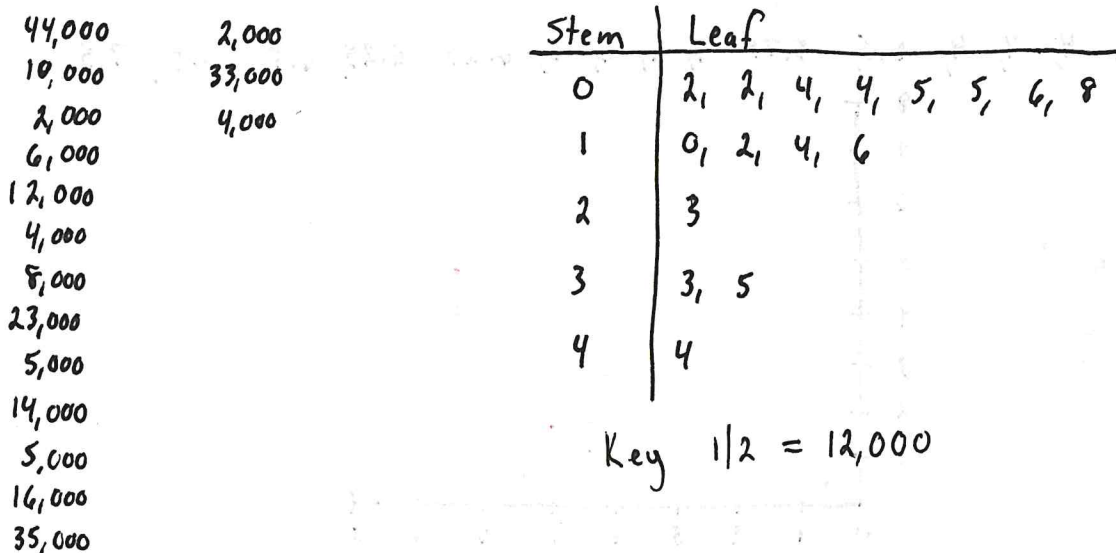
|           |           |           |           |           |           |
|-----------|-----------|-----------|-----------|-----------|-----------|
| \$116,200 | \$110,200 | \$140,700 | \$139,400 | \$114,600 | \$118,300 |
| \$117,600 | \$130,900 | \$112,000 | \$136,000 | \$113,500 | \$118,300 |
| \$95,200  | \$135,300 | \$120,000 |           |           |           |



6.

Per Capita Income

| Country         | US Dollars | Country      | US Dollars | Country     | US Dollars |
|-----------------|------------|--------------|------------|-------------|------------|
| Austria         | 44,149     | Armenia      | 7,774      | Barbados    | 15,566     |
| Dominica        | 10,030     | The Bahamas  | 23,102     | Puerto Rico | 34,744     |
| Solomon Islands | 2,068      | Moldova      | 4,669      | Benin       | 1,791      |
| Cape Verde      | 6,412      | Turkmenistan | 14,001     | Israel      | 32,760     |
| Macedonia       | 11,802     | Nicaragua    | 4,571      | Micronesia  | 3,558      |
| Yemen           | 3,958      |              |            |             |            |



Draw a histogram for each data set. (4 pts each)

7.

Annual Household Income

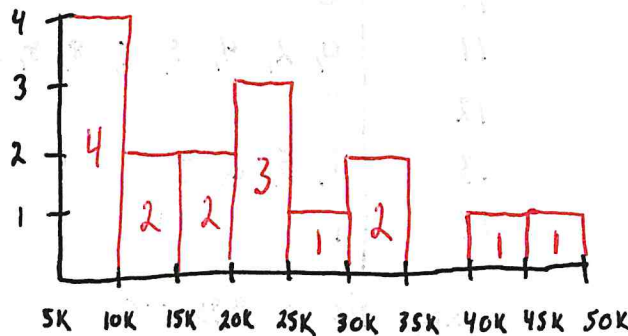
|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| \$23,700 | \$10,850 | \$45,550 | \$19,000 | \$9,700  | \$23,950 |
| \$7,350  | \$11,750 | \$40,850 | \$5,500  | \$17,250 | \$33,250 |
| \$32,300 | \$22,350 | \$9,250  | \$25,300 |          |          |

5500, 7350, 9250, 9700, 10850, 11750, 17250, 19000, 22350, 23700, 23950,

↑  
min

25300, 32300, 33250, 40850, 45550

↑  
max



Range = 45550 - 5500  
= 40050

8.

Sales Tax

| State        | Percent | State        | Percent |
|--------------|---------|--------------|---------|
| Colorado     | 2.9     | Ohio         | 5.75    |
| Florida      | 6       | Connecticut  | 6.35    |
| Georgia      | 4       | Nebraska     | 5.5     |
| California   | 7.5     | New York     | 4       |
| Michigan     | 6       | South Dakota | 4       |
| Pennsylvania | 6       | Illinois     | 6.25    |
| Texas        | 6.25    | Arkansas     | 6.5     |
| Delaware     | 0       | Maryland     | 6       |

0, 2.9, 4, 4, 4, 5.5, 5.75, 6, 6, 6, 6, 6.25, 6.25, 6.35, 6.5, 7.5

↑  
min

↑  
max

Range = 7.5 - 0  
= 7.5

