



Name: _____

Date Started: _____ Date Finished: _____ Score: _____

Learning Activity Sheet
Solving Problems Involving Measures of Position

Solve the following problems. Write your answers in the space provided below.

1. The satisfaction ratings of 25 employees are determined using a semantic differential rating scale (1 being the lowest and 10 being the highest). The data are as follows: 8, 7, 5, 6, 9, 4, 6, 6, 7, 2, 8, 9, 3, 5, 7, 7, 4, 8, 9, 6, 7, 3, 4, 5, 7. According to the Human Resource (HR) department, at most, 20% of the employees are very dissatisfied in their workplace. What rate is HR's basis for making such a statement?

2. A survey shows that, at most, 20% of the respondents spent greater than x minutes watching a certain TV program. The distribution of the respondents is as follows. Determine the value of x .

| Time (hours) | 15-44 | 45-74 | 75-104 | 105-134 | 135-164 |
|--------------|-------|-------|--------|---------|---------|
| Respondents | 5 | 11 | 9 | 15 | 10 |



3. The salaries of two companies are recorded as follows:

| | | | | | | | | | |
|-----------|--------|--------|--------|--------|--------|--------|-------|-------|--------|
| Company A | 13,000 | 11,500 | 9,800 | 14,000 | 18,000 | 15,000 | 8,100 | 6,900 | 13,450 |
| Company B | 5,700 | 19,200 | 14,500 | 16,800 | 11,050 | 12,400 | 8,900 | 6,700 | 7,550 |

Answer the following questions. Write your answers in the spaces provided:

1. What is the value of the first quartile of the salary of the employees in Company A?

2. What is the value of the upper quartile of the salary of the employees in Company A?

3. Determine the interquartile range of the salary of the employees in Company A.

4. What is the value of the 1st quartile of the salary of the employees in Company B?

5. What is the value of the upper quartile of the salary of the employees in Company B?

6. Determine the interquartile range of the salary of the employees in Company B.

7. Which among the companies is more likely to have a salary-gap problem? Justify your answer.
