

Name \_\_\_\_\_

**MULTIPLE CHOICE.** Choose the one alternative that best completes the statement or answers the question.

Find the mean of the data summarized in the given frequency table.

- 1) A company had 80 employees whose salaries are summarized in the frequency table below. Find the mean salary.

Salary (\$)	Employees
5,001–10,000	20
10,001–15,000	13
15,001–20,000	13
20,001–25,000	12
25,001–30,000	22

- A) \$15,919.2                      B) \$19,456.8                      C) \$17,688.00                      D) \$17,500

Find the variance for the given data. Round your answer to one more decimal place than the original data.

- 2) 15, 4, 12, 18, and 1

- A) 73.3                      B) 52.5                      C) 52.4                      D) 42.0

Find the standard deviation for the given data. Round your answer to one more decimal place than the original data.

- 3) 2, 6, 15, 9, 11, 22, 1, 4, 8, 19

- A) 2.1                      B) 6.8                      C) 7.1                      D) 6.3

Find the standard deviation of the data summarized in the given frequency table.

4. Number of problems missed on the last test.

0-2	20
3-5	14
6-8	15
9-11	2
12-14	1

Solve the problem.

5) The heights in feet of people who work in an office are as follows. Use the range rule of thumb to find the standard deviation. Round results to the nearest tenth.

5.9 5.7 5.5 5.4 5.7 5.5 5.6 6.2 6.1 5.5

A) 1.2

B) 0.5

C) 0.1

D) 0.2

Use the empirical rule to solve the problem.

6) The systolic blood pressure of 18-year-old women is normally distributed with a mean of 120 mmHg and a standard deviation of 12 mmHg. What percentage of 18-year-old women have a systolic blood pressure between 96 mmHg and 144 mmHg?

A) 99.74%

B) 95.44%

C) 99.99%

D) 68.26%

Solve the problem.

7) The heights of the adults in one town have a mean of 67.3 inches and a standard deviation of 3.4 inches. What can you conclude from Chebyshev's theorem about the percentage of adults in the town whose heights are between 60.5 and 74.1 inches?

A) The percentage is at most 95%

B) The percentage is at most 75%

C) The percentage is at least 75%

D) The percentage is at least 95%