CONCORDIA COLLEGE
MOORHEAD, MINNESOTA

Name: ______________________

Date: ______________________

Section: ○ Mon/Wed ○ Tue/Thu

1. **(6 Points)**

A store summarizes customer purchase amounts using the following five-number summary:

Minimum	**First Quartile (Q_1)**	**Median (Q_2)**	**Third Quartile (Q_3)**	**Maximum**
\$5	\$20	\$35	\$50	\$200

A. Calculate the interquartile range. Show your calculation.

- Answer: ______________________

B. What does the interquartile range tell you about the spread of customer purchase amounts?

- Answer: ______________________

C. The largest purchase amount is corrected from \$200 to \$2,000. Would the mean or median change more? Explain.

- Answer: ______________________

2. **(4 Points)**

Two delivery companies both have a mean delivery time of 30 minutes. Company A has a standard deviation of 3 minutes, while Company B has a standard deviation of 10 minutes.

A. Which company has more consistent delivery times? Explain.

- Answer: ______________________

B. A customer concludes that every delivery from Company A is faster than every delivery from Company B. Do these summaries support that conclusion? Explain.

- Answer: ______________________

Score: ______ / 10