

# Statistics Data Story Graphic Organizer: Centers, Spreads, and Claims

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Direct Practice

1. A data set of quiz scores is:  $\{4, 5, 6, 6, 7, 8, 9\}$ . Choose the best-supported statement about the center and spread.

Direct Practice

2. Two groups' test scores are shown below. Determine which group is more variable using IQR and select the supported statement.  
Group A:  $\{10, 11, 12, 12, 12, 13, 14, 15\}$   
Group B:  $\{8, 10, 12, 12, 15, 18, 20, 22\}$

Direct Practice

3. Two box plots (five-number summaries) for weekly study minutes are given.

Class A:

$[\min = 40, Q_1 = 50, \text{median} = 60, Q_3 = 70, \max = 80]$

Class B:

$[\min = 45, Q_1 = 55, \text{median} = 57, Q_3 = 59, \max = 65]$

Choose the statement that best compares center and consistency.

Critical Thinking

4. A tutoring program reports: Tutored group  $n = 30$ , mean = 78, standard deviation = 6; Non-tutored group  $n = 30$ , mean = 74, standard deviation = 12. Which claim is best supported by the descriptive statistics?

Word Problem

5. Commute times (in minutes) over 12 days for two routes are recorded.

Route A: {18, 19, 20, 20, 21, 21, 22, 22, 23, 24, 25, 26}

Route B: {16, 17, 19, 21, 21, 22, 22, 24, 26, 28, 28, 30}

Which statement best describes which route is more reliable (less variable) and which has the shorter typical time?