20. **POPULATION** The population densities (in people per square mile) for each of the 10 most densely populated states in 2003 were 719.0, 418.5, 315.6, 563.6, 820.6, 1164.6, 406.5, 279.3, 275.9, and 1029.9.

   a. Find the mean, median, and mode(s) of the data set.

   b. Which measure of central tendency best represents the data? *Explain.*

   TEXAS @HomeTutor for problem solving help at classzone.com

21. **BOWLING** The average scores of the bowlers on two different bowling teams are given. *Compare* the spreads of the data sets using (**a**) the range and (**b**) the mean absolute deviation.

   Team 1: 162, 150, 173, 202   **Team 2:** 140, 153, 187, 196

22. **TAKS REASONING** The Mississippi River discharges an average of 230 million tons of sediment per year. The average sediment discharges (in millions of tons per year) of the seven U.S. rivers with the greatest discharges are 230, 80, 65, 40, 25, 15, and 11. For parts (a)–(c) below, round your answers to the nearest whole number, if necessary.

   a. Find the mean and median of the data. Which measure represents the data better? *Explain.*

   b. Find the mean of the data for the other six rivers, excluding the Mississippi River. Does this mean represent the data better than the mean you found in part (a)? *Explain.*

   c. Find the range and mean absolute deviation of the data for all seven rivers. *Describe* what the measures tell you about the dispersion of the data.

Fishing boat on the Mississippi River

23. **CHALLENGE** So far, you have scored 84, 92, 76, 88, and 76 on five of the six tests you will take in a particular class. Your goal is to finish the year with a test average of 85 or greater.

   a. Let x represent your last test score. Write an expression for the mean of your test scores. Then write and solve an inequality to find the possible scores you can achieve in order to meet your goal.

   b. After the last test, your teacher tells you that the median of your six test scores is 86. Can you tell whether you met your goal? *Explain.*

MIXED REVIEW FOR TAKS

TAKS PRACTICE at classzone.com

24. **TAKS PRACTICE** A school's cafeteria surveyed 150 students about their preferred types of fruit. The results are shown in the table. If the cafeteria uses only these data to order fruit, which conclusion best reflects the data collected? *TAKS Obj. 9*

Fruit	Frequency
Apples	66
Bananas	39
Grapes	34
Pears	11

   A More than half of each order should be apples.

   B Only apples and bananas should be ordered.

   C About a quarter of each order should be pears.

   D About two-thirds of each order should be apples and grapes.