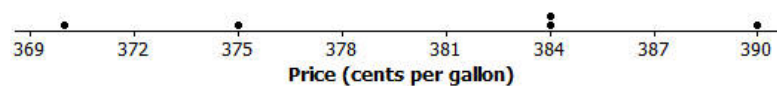


Problem Set

1. The number of pockets in the clothes worn by four students to school today is 4, 1, 3, 4.
 - a. Perform the fair share process to find the mean number of pockets for these four students. Sketch the cubes representations for each step of the process.
 - b. Find the total of the distances on each side of the mean to show the mean found in part (a) is correct.
2. The times (rounded to the nearest minute) it took each of six classmates to run a mile are 7, 9, 10, 11, 11, and 12 minutes.
 - a. Draw a dot plot representation for the mile times.
 - b. Suppose that Sabina thinks the mean is 11 minutes. Is she correct? Explain your answer.
 - c. What is the mean?
3. The prices per gallon of gasoline (in cents) at five stations across town on one day are shown in the following dot plot. The price for a sixth station is missing, but the mean price for all six stations was reported to be 380 cents per gallon. Use the balancing process to determine the price of a gallon of gasoline at the sixth station.

Dot Plot of Price (cents per gallon)

4. The number of phones (landline and cell) owned by the members of each of nine families is 3, 5, 6, 6, 6, 6, 7, 7, 8.
 - a. Use the mathematical formula for the mean (determine the sum of the data points, and divide by the number of data points) to find the mean number of phones owned for these nine families.
 - b. Draw a dot plot of the data, and verify your answer in part (a) by using the balancing process.