Taste Testing

You have recently been promoted to the job of Director of Market Research for the Snacks Stat! Corporation. Your test kitchens have developed several new flavors of gourmet energy bars that you think have the potential to be big sellers. You have asked your staff to conduct free tastings, followed by surveys, to find out what the town’s public thinks of the new products. The results of one of the surveys are depicted in a graph on the right.

Work the Math Record your answers on separate paper.

1. What is the sample size for this survey?
2. Assuming the survey is statistically valid and the town has 1,500 citizens, approximately how many people would pick the Boysenberry-Jalapeño flavor if everyone in town were asked?

Your test kitchens are producing one great product idea after another! They have developed a line of healthy, ready-to-drink smoothies. Your staff has conducted a survey to identify what customers think of the new drinks, presented below:

Work the Math Record your answers on separate paper.

3. How could the total number of responses be greater than the sample size?
4. Which question gives the Snacks Stat! Corporation better information: “Which is your favorite flavor?” or “Which flavors would you buy?” Explain why.
5. If the participants who had an interest in Spinach-Kiwi smoothies reported, on average, that they would buy two Spinach-Kiwi smoothies per month, how many Spinach-Kiwi smoothies could Snacks Stat! expect to sell in a town of 1,500 people?