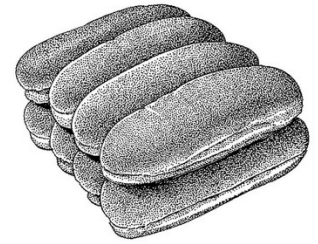


The Hot Dog Buns Dilemma

Name _____

Directions: Please read carefully and show all work.

Dilemma: Why is the number of hot dogs in a package not the same as the number of hot dog buns in a package?



1. One theory is that this dilemma is a conspiracy to force consumers to buy more of each product. If hot dogs are packaged with 10 dogs per pack, and the hot dog buns are packaged with 8 buns per pack, how many packages of hot dogs and how many packages of buns must be purchased so that the consumer will have an equal amount of each?

2. A more reliable theory is that meat packers are thinking in terms of pounds regarding packaging, as opposed to the number of hot dogs in the package. When packages weigh exactly one pound, they are easier to measure, sell, and store. A standard weight hot dog weighs 1.6 ounces.
 - a.) What is the weight, in pounds, of a package of 10 standard weight hot dogs?

 - b.) If the meat packer has 800 pounds of hot dogs, how many packages of normal weight hot dogs will be produced?

 - c.) If a jumbo hot dog weighs 2 ounces, how many jumbos will be packaged in one 1-pound package?

3. Another theory is that bakers prefer to work in dozens, or multiples of three or four. The “dozen” leads to more compact configurations for baking pans, as well as packaging. Such configurations provide for maximum efficiency during baking and shipping.
 - a.) A baker places 12 hot dog buns in a package for a cost of \$2.35. What is the cost per hot dog bun, to the *nearest penny*.

 - b.) The same baker also places 10 hot dog buns in a package for the same cost. What is the cost per hot dog bun in this packaging, to the *nearest penny*.

 - c.) A local grocery store sells 15 packages of the 12-pack hot dog buns described in part **a**. How much more money would be made if the same number of buns were sold in the 10-packs described in part **b**?

4. Oscar Mayer (a well known hot dog producer) has commented that of the 50,000 consumer letters they receive each year, only 0.03% complain about the hot dog/bun controversy. How many letters are received each year regarding the mismatch packaging of hot dogs and buns?
5. Some hot dog packers feel that the most manageable size hot dog weighs an eighth of a pound, and package 8 hot dogs per package. In the movie *Father of the Bride*, George Banks (Steve Martin) has a supermarket meltdown regarding packages of 8 hot dogs versus packages of 12 buns.
- a.) If George purchases 12 packages of buns, how many buns did he purchase?
- b.) How many packages of hot dogs George would need to buy to have enough hot dogs for each of the buns he purchased in part a?
- c.) What is the minimum number of packages of hot dogs and buns would George need to purchase so that he has an equal amount of each?
6. One barbeque king theorizes that hot dogs are sold in packages of 10 and buns are sold in packages of 8 because 2 of the hot dogs always fall through the grill, so only 8 buns are needed. According to this theory, if 4 packages of hot dogs and 4 packages of buns are purchased for a family barbeque, what percent of the hot dogs will fall in the grill?

