

23. CAVEAT EMPTOR

Meg and Charlie usually order one mushroom and sausage pizza at the C & E Pizzeria. This pizza has a diameter of 50 centimeters and costs \$5.00. Last week, however, C & E had a special: three 25 centimeter pizzas for \$5.00.

“Let’s try the special,” Charlie said, expecting to gorge himself with the wonderfully oily morsels of the C & E specialty. “This place will go broke if they keep this special for very long.”

After the meal, however, Meg complained, “I think this pizzeria is making more money than ever!”

Why was Meg so upset?

Hint 1

Draw a diagram comparing the sizes of the pizzas.

Hint 2

Solve an analogous problem. Suppose the pizzas were square shaped; what would be the effect of halving the length of one side?

Hint 3

Do a bit of research. Find a formula for calculating the area of a circle.

ANSWER: Meg was upset because she had to pay the same amount for the special but received only three-fourths as much pizza as she would ordinarily get.