
Problem of the Week

Solution One

Expressed in terms of x , what is $x\%$ of $x\%$ of $x\%$ of 1,000,000?

SOLUTION: The answer is x^3 .

Recall that finding $x\%$ of a number is the same as multiplying that number by $\frac{x}{100}$. Therefore, we are being asked to evaluate the following:

$$\left(\frac{x}{100}\right) \left(\frac{x}{100}\right) \left(\frac{x}{100}\right) (1000000).$$

This is readily seen to be

$$\left(\frac{x^3}{1000000}\right) (1000000),$$

which is equal to x^3 , as claimed.