

Question 1: Let the real valued functions f and g be defined by $f(x) = 2x + 1$ and $g(x) = x^2 - 1$ obtain the expression for $fg(x)$

Question 2: Test the following argument for validity:

Logic is difficult or not many students like logic.

If Mathematics is easy, then logic is not difficult.

Therefore, Mathematics is not easy or logic is difficult

Question 3: Test the validity of the following argument,

If Nomi studies then he will not fail in mathematics

If he does not play basket ball then he will study

But he failed in mathematics.

Therefore he played basket ball.

Question 4: What is the difference between $\{a,b\}$ and $\{\{a,b\}\}$?

Answer:

$\{a,b\}$ is a set while $\{\{a,b\}\}$ is a subset of some set.

Question 5: Write the geometric sequence with positive terms whose second term is 9 and fourth term is 1.