Answer on Question # 76320 – Math – Calculus

Question

New domain of the function (f) given by f (x) is equal to $\frac{\sqrt{2-x}}{x}$ is zero and one, is it true or false? Give reason.

Solution

Function (f) is given by f(x) = $\frac{\sqrt{2-x}}{x}$

The domain of a function is the set of input or argument values for which the function is real and defined.

The function f(x) is undefined at x = 0.

For non-negative values for radicals, 2-x ≥ 0

or x ≤ 2.

So, the domain of the function is x < 0 or 0< x ≤ 2.

Answer: No, the statement is false.