

Conditions

$$x^2 - x/x + 5 * x^2 + 5x + 4/x^4 - x^2$$

perform the indicated operation. the values that would be excluded from the domain are?

Solution

$$\frac{x^2 - x}{x + 5} \cdot \frac{x^2 + 5x + 4}{x^4 - x^2}$$

The values that would be excluded from the domain are those, where denominators are 0. In other words, we must solve 2 equations to find them:

$$x + 5 = 0, x = -5$$

$$x^4 - x^2 = 0, x = 0, x = -1, x = 1$$

But as the numerator of 1st fraction has a factor (x-1), so the value x=1 is not excluded from the domain.

Answer: -5, 0, -1