

19)

$$\frac{3}{4x^4 - 5x^2 + 1} + \frac{1}{x^2 - 4x^4} = \frac{1}{2x^4 + 3x^3 + x^2}$$

$$\frac{3}{4x^4 - 4x^2 - x^2 + 1} - \frac{1}{4x^4 - x^2} = \frac{1}{x^2(2x^2 + 3x + 1)}$$

$$\frac{3}{4x^2(x^2 - 1) - (x^2 - 1)} - \frac{1}{x^2(4x^2 - 1)} = \frac{1}{x^2(2x^2 + 2x + x + 1)}$$

$$\frac{3}{(x^2 - 1)(4x^2 - 1)} - \frac{1}{x^2(2x + 1)(2x - 1)} = \frac{1}{x^2[2x(x + 1) + (x + 1)]}$$

$$\frac{3}{(x + 1)(x - 1)(2x + 1)(2x - 1)} - \frac{1}{x^2(2x + 1)(2x - 1)} = \frac{1}{x^2(x + 1)(2x + 1)}$$

$$\frac{3x^2 - (x + 1)(x - 1)}{x^2(x + 1)(x - 1)(2x + 1)(2x - 1)} = \frac{(x - 1)(2x - 1)}{x^2(x + 1)(x - 1)(2x + 1)(2x - 1)}$$

Condizioni: $x \neq 0$, $x \neq \pm 1$, $x \neq \pm 1/2$

$$\cancel{3x^2} - \cancel{x^2} - 1 = \cancel{2x^2} - x - 2x - 1$$

$$3x = 0$$

~~$x = 0$~~ NON ACCETTABILE