

я делаю это так:

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

$$\frac{3}{x^2-2x+1} - \frac{2}{x^2-1} - \frac{1}{x+1} = 0$$

$$\frac{3}{(x-1)(x-1)} - \frac{2}{(x+1)(x-1)} - \frac{1}{x+1} = 0$$

$$\frac{3}{(x-1)^2} - \frac{2}{(x+1)(x-1)} - \frac{1}{x+1} = 0$$

$$\frac{3(x+1)-2(x-1)-(x-1)^2}{(x-1)^2(x+1)} = 0$$

$$\frac{3(x+1)-2(x-1)-(x^2-2x+1)}{(x-1)^2(x+1)} = 0$$

$$\frac{(3x+3)-(2x-2)-(x^2-2x+1)}{(x-1)^2(x+1)} = 0$$

$$\frac{3x+3-2x+2-x^2+2x-1}{(x-1)^2(x+1)} = 0$$

$$\frac{3x+4-x^2}{(x-1)^2(x+1)} = 0$$

$$-\frac{x^2-3x-4}{(x-1)^2(x+1)} = 0$$

$$-\frac{(x-4)(x+1)}{(x-1)^2(x+1)} = 0$$

$$-\frac{x-4}{(x-1)^2} = 0$$

$$\frac{x-4}{(x-1)^2}=0$$

$$x-4=0$$

$$x=4$$