$$3^{x-1} - 3^{2x+1} + 26 = 0$$

$$3^x \cdot 3^{-1} - 3^{2x} \cdot 3^1 + 26 = 0$$

$$\frac{3^x}{3} - (3^x)^2 \cdot 3 + 26 = 0$$

$3^x = t$

$$\frac{t}{3} - 3t^2 + 26 = 0$$

$$-9t^2 + t + 78 = 0$$

$$t = \frac{-(1) \pm \sqrt{(1)^2 - 4 \cdot (-9) \cdot (78)}}{2 \cdot (-9)} = \begin{cases} 3 \\ -\frac{26}{9} \end{cases}$$

$3^x = t = 3 = 3^1 \Rightarrow \boxed{x = 1}$

$3^x = t = -\frac{26}{9} \Rightarrow$ NO HAY SOLUCIÓN

LA SOLUCIÓN ES $x = 1$