$\Rightarrow \quad -5x + 13 = 2x + 4$

$13 - 4 = 7x$

$\Rightarrow \quad \frac{9}{7} = x$

Luego $\frac{9}{7} \notin [-2, 1)$, $C.S_2 : \emptyset$.

Para : $x \in [1, 3)$

$(x-1) + 4 \cdot -(x-3) = 2(x+2)$

$x - 1 - 4x + 12 = 2x + 4$

$-3x + 11 = 2x + 4$

$11 - 4 = 5x$

$\frac{7}{5} = x$

Luego $\frac{7}{5} \in [1, 3)$ ✓

$C.S_3 : \{ x = \frac{7}{5} \}$

Para : $x \in [3, +\infty)$; $(x-1) + 4 \cdot (x-3) = 2(x+2)$

$\Rightarrow \quad x - 1 + 4x - 12 = 2x + 4$

$\Rightarrow \quad 5x - 13 = 2x + 4$