

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

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

$$\begin{aligned} & 2x^2+4x-x-2 \\ & 2x(x+2)-(x+2) \\ & (x+2)(2x-1) \end{aligned}$$

$$\text{CE. } x \neq -2 \wedge x \neq \frac{1}{2}$$

$$\cancel{D} \frac{8x^2(x+2) - 2(2x-1) - (2x-1)(x+2) - 2(2x-1)^2(x+2)}{2(2x-1)^2(x+2)} = 0 \quad \cancel{D}$$

$$8x^3 + 16x^2 - 4x + 2 - (2x^2 + 4x - x - 2) - 2(4x^2 + 1 - 4x)(x+2) = 0$$

$$8x^3 + 16x^2 - 4x + 2 - 2x^2 - 3x + 2 - 2(4x^3 + 8x^2 + x + 2 - 4x^2 - 8x) = 0$$

$$\cancel{8x^3} + 14x^2 - 7x + 4 - \cancel{8x^3} - 8x^2 + 14x - 4 = 0$$

$$6x^2 + 7x = 0$$

$$x(6x+7) = 0 \Rightarrow x = 0 \vee x = -\frac{7}{6}$$

$$S = \left\{ -\frac{7}{6}, 0 \right\}$$