Regla de la Cadena

1. Completar los cuadros vacíos, para que la igualdad tenga sentido (Escriba en los recuadros "sin dejar espacio" y letra minúscula)

I)

$$\frac{d}{dx}\sqrt{\frac{x+1}{2x-1}} = \frac{d}{dx}\left(\frac{x+1}{2x-1}\right)^{\square/\square}$$

$$= \frac{\square}{\square}\left(\frac{x+1}{2x-1}\right)^{\square/\square} \cdot \frac{d}{dx}\left(\frac{\square}{\square}\right)$$

$$= \frac{1}{2}\left(\frac{2x-1}{x+1}\right)^{\square/\square} \cdot \frac{(\square)\frac{d}{dx}(\square) - (\square)\frac{d}{dx}(\square)}{(\square)^{\square}}$$

$$= \frac{1}{2}\left(\frac{2x-1}{x+1}\right)^{1/2} \cdot \frac{(\square) - \square(\square)}{(x+1)^2}$$

$$= \frac{1}{2}\left(\frac{2x-1}{x+1}\right)^{1/2} \cdot \frac{\square x - \square - 2x - 2}{(x+1)^2}$$

$$= \frac{1}{2}\frac{(2x-1)^{1/2}}{(x+1)^{1/2}} \cdot \frac{\square}{(x+1)^2}$$

$$= \boxed{\frac{\square(2x-1)^{1/2}}{\square(x+1)^{\square/\square}}}$$

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II) $\frac{d}{dx}\left(\frac{\sqrt{2x-1}}{x+1}\right) = \frac{d}{dx}\frac{(2x-1)^{1/2}}{x+1}$

$= \frac{(\square)\frac{d}{dx}(\square)^{1/2} - (\square)^{1/2}\frac{d}{dx}(\square)}{(\square)^2}$

$= \frac{(\square)(\frac{1}{2})(\square)^{\square/\square}\frac{d}{dx}(\square) - (2x-1)^{1/2}}{(x+1)^2}$

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

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

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

$= \boxed{\frac{(2x-1)^{-1/2}(2-\square)}{(x+1)^2}}$

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