

$$\begin{aligned}
14. & \left(\frac{x^{-1}}{1+x^{-1}} + \frac{1-x^{-1}}{x^{-1}} \right) : \left(\frac{x^{-1}}{1+x^{-1}} - \frac{1-x^{-1}}{x^{-1}} \right) = \\
& = \left(\frac{\frac{1}{x}}{1+\frac{1}{x}} + \frac{1-\frac{1}{x}}{\frac{1}{x}} \right) : \left(\frac{\frac{1}{x}}{1+\frac{1}{x}} - \frac{1-\frac{1}{x}}{\frac{1}{x}} \right) = \\
& = \left(\frac{\frac{1}{x}}{\frac{x+1}{x}} + \frac{\frac{x-1}{x}}{\frac{1}{x}} \right) : \left(\frac{\frac{1}{x}}{\frac{x+1}{x}} - \frac{\frac{x-1}{x}}{\frac{1}{x}} \right) = \\
& = \left(\frac{1 \cdot x}{x+1} + \frac{x-1 \cdot x}{1} \right) : \left(\frac{1 \cdot x}{x+1} - \frac{x-1 \cdot x}{1} \right) = \\
& = \left(\frac{1}{x+1} + x-1 \right) : \left(\frac{1}{x+1} - x-1 \right) = \\
& = \frac{1+(x-1)/(x+1)}{x+1} : \frac{1-(x-1)/(x+1)}{x+1} = \\
& = \frac{\cancel{1} + x^2 - \cancel{1}}{x+1} \cdot \frac{x+1}{1-(x^2-1)} = \frac{x^2}{x+1} \cdot \frac{x+1}{1-x^2+1} = \frac{x^2}{2-x^2}
\end{aligned}$$

$$\begin{aligned}
x & \neq 0 \\
x & \neq -1 \\
x & \neq \pm \sqrt{2}
\end{aligned}$$