

$$\begin{aligned}
 a) \quad & \frac{\frac{x^2 + 2x + 1}{x}}{\frac{x^2 - 1}{x}} = \\
 & = \frac{(x^2 + 2x + 1) \cdot x}{x \cdot (x^2 - 1)} = \frac{(x+1)(x+1) \cdot x}{(x+1)(x-1) \cdot x} =
 \end{aligned}$$

$$= \int \frac{x+1}{x-1}$$

$x \neq -1; 0$

$$b) \quad \frac{1}{1 + \frac{1}{1 + \frac{1}{x}}} = \frac{1}{1 + \frac{1}{\frac{x+1}{x}}} =$$

$$= \frac{1}{1 + \frac{x}{x+1}} = \frac{1}{\frac{x+1+x}{x+1}} =$$

$$= \frac{x+1}{2x+1}$$