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$$\lim_{x \rightarrow -1} \left(\frac{x^2 + 2x + 3}{x + 3} \right)^{\frac{1}{\sin(x+1)}} =$$

$$= \lim_{x \rightarrow -1} e^{\frac{1}{\sin(x+1)} \log \frac{x^2 + 2x + 3}{x + 3}}$$

$$= \lim_{x \rightarrow -1} e^{\frac{1}{\sin(x+1)} \log \left[1 + \left(\frac{x^2 + 2x + 3}{x + 3} - 1 \right) \right]}$$

$$= \lim_{x \rightarrow -1} e^{\frac{1}{\sin(x+1)} \left(\frac{x^2 + 2x + 3}{x + 3} - 1 \right) \log \left[1 + \left(\frac{x^2 + 2x + 3}{x + 3} - 1 \right) \right]}$$

$$= \lim_{x \rightarrow -1} e^{\frac{1}{\sin(x+1)} \frac{x^2 + 2x + 3 - x - 3}{x + 3} \log \left[1 + \left(\frac{x^2 + 2x + 3}{x + 3} - 1 \right) \right]}$$

$$= \lim_{x \rightarrow -1} e^{\frac{1}{\sin(x+1)} \frac{x^2 + x}{x + 3} \log \left[1 + \left(\frac{x^2 + 2x + 3}{x + 3} - 1 \right) \right]}$$

$$= \lim_{x \rightarrow -1} e^{\frac{1}{\sin(x+1)} \frac{x^2 + 2x + 3 - 1}{x + 3}}$$

1. Rimsky-Korsakov - Berliner Philharmonie
2. Rodrigo - Concerto gentilhombre. Octavio de Oca Alonso.
3. Ravel - Bolero / Berlioz - Rimski-Korsakov - Enerco: Rapsodie Sinfonica di B...
4. Rostropovich - cello concert in B...
5. Rachmaninov - Vladimir Ashkenazy Orchestra - Anshel...
7. Ravel - Bolero - in Sol major's Orchestra Sinfonica...
8. Robini - Stobal & Coors - Cello H...

$$\frac{x+1}{\sin(x+1)} \cdot \frac{x}{x+3} \log \left[1 + \left(\frac{x^2+2x+3}{x+3} - 1 \right) \right]$$

$$= \lim_{x \rightarrow -1} e$$

$$= e^{1 \cdot \frac{-1}{2} \cdot 1} = e^{-\frac{1}{2}} = \frac{1}{\sqrt{e}}$$

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$$\lim_{x \rightarrow 2} \left(\frac{x^3+x+1}{x^2+7x-7} \right)^{\frac{11e^2}{e^x-e^2}} =$$

$$\frac{11e^2}{e^x-e^2} \log \frac{x^3+x+1}{x^2+7x-7}$$

$$= \lim_{x \rightarrow 2} e$$

$$\frac{11e^2}{e^x-e^2} \log \left[1 + \left(\frac{x^3+x+1}{x^2+7x-7} - 1 \right) \right]$$

$$= \lim_{x \rightarrow 2} e$$

$$\frac{11e^2}{e^x-e^2} \cdot \left(\frac{x^3+x+1}{x^2+7x-7} - 1 \right) \frac{\log \left[1 + \left(\frac{x^3+x+1}{x^2+7x-7} - 1 \right) \right]}{\left(\frac{x^3+x+1}{x^2+7x-7} - 1 \right)} = e$$

$$= \lim_{x \rightarrow 2} e$$

$$\frac{11e^2}{e^x-e^2} \frac{x^3}{x^2}$$

$$= \lim_{x \rightarrow 2} e$$

$$\frac{11(x-2)}{e^{x-2}-1}$$

$$= \lim_{x \rightarrow 2} e$$

$$\left. \begin{aligned} & \frac{x^3-x^2-6}{x^3-2x^2} \\ & \parallel \frac{x^2-6}{x^2-2} \\ & \parallel \frac{-4}{-4} \end{aligned} \right\}$$

$$= \frac{11 \cdot 1 \cdot 2}{11}$$

$$= e$$