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$$\lim_{x \rightarrow 0} \frac{\log(5^x - 1)}{\log(\sqrt[3]{1+x} - 1)} =$$

$$= \lim_{x \rightarrow 0} \frac{\log\left(\frac{5^x - 1}{x} \cdot x\right)}{\log\left(\frac{\sqrt[3]{1+x} - 1}{x} \cdot x\right)} =$$

$$= \lim_{x \rightarrow 0} \frac{\log\left(\frac{5^x - 1}{x}\right) + \log x}{\log\left(\frac{\sqrt[3]{1+x} - 1}{x}\right) + \log x} =$$

$$\lim_{x \rightarrow 0} \frac{\lim_{x \rightarrow 0} \log x \left[\frac{\log \frac{5^x - 1}{x}}{\log x} + 1 \right]}{x \rightarrow 0}$$

$$\lim_{x \rightarrow 0} \frac{\lim_{x \rightarrow 0} \log x \left[\frac{\log \sqrt[3]{1+x} - 1}{x} + 1 \right]}{x \rightarrow 0}$$

$$= \lim_{x \rightarrow 0} \frac{\frac{\log \log 5}{\infty} + 1}{\frac{\log \frac{1}{3}}{\infty} + 1} = 1$$