

$$-32 \quad \lim_{x \rightarrow 1} \frac{\sqrt[3]{x} - x}{x-1} = \lim_{x \rightarrow 1} \frac{\sqrt[3]{x^2} + \sqrt[3]{x} \cdot x + x^2}{\sqrt[3]{x^2} + \sqrt[3]{x} \cdot x + x^2} = \lim_{x \rightarrow 1} \frac{x - x^3}{(x-1)(\sqrt[3]{x^2} + \sqrt[3]{x} \cdot x + x^2)} = \lim_{x \rightarrow 1} \frac{x(1-x^2)}{(x-1)(\sqrt[3]{x^2} + \sqrt[3]{x} \cdot x + x^2)} =$$

$$\lim_{x \rightarrow 1} \frac{x(1-x)(1+x)}{(x-1)(\sqrt[3]{x^2} + \sqrt[3]{x} \cdot x + x^2)} = \frac{-1 \cdot 2}{1+1+1} = \frac{-2}{3}$$