5.16 1)

$$\left.\begin{aligned}
&\frac{2x^2-3x+1}{x-1} \le f(x) \le \frac{x^3-x}{x-1}\\
&\lim_{x\to1}\frac{2x^2-3x+1}{x-1}=\lim_{x\to1}\frac{(2x-1)\cancel{(x-1)}}{\cancel{x-1}}=2\cdot1-1=\boxed{1}\\
&\lim_{x\to1}\frac{x^3-x^2}{x-1}=\lim_{x\to1}\frac{x^2(x-1)}{x-1}=\lim_{x\to1}\frac{x^2\cancel{(x-1)}}{\cancel{x-1}}=1^2=\boxed{1}
\end{aligned}\right\}\xRightarrow{\text{κριτήριο παρεμβολής}}\boxed{\lim_{x\to1}f(x)=2}$$

5.16 2)

$$\left.\begin{aligned}
&\frac{4x-8\sqrt{x}}{\sqrt{x}-2} \le f(x) \le \frac{x^2-16}{x-4}\\
&\lim_{x\to4}\frac{4x-8\sqrt{x}}{\sqrt{x}-2}=\lim_{x\to4}\frac{4\sqrt{x}^2-8\sqrt{x}}{\sqrt{x}-2}=\lim_{x\to4}\frac{4\sqrt{x}\cancel{\left(\sqrt{x}-2\right)}}{\cancel{\sqrt{x}-2}}=8\\
&\lim_{x\to4}\frac{x^2-16}{x-4}=\lim_{x\to4}\frac{\cancel{(x-4)}(x+4)}{\cancel{x-4}}=8
\end{aligned}\right\}\xRightarrow{\text{κριτήριο παρεμβολής}}\boxed{\lim_{x\to4}f(x)=8}$$