Problem of the Week-5

Determine whether the following limit exists or not. If it does, find its value. Show your work and justify your answer.¹

$$\lim_{x \to -\infty} \frac{1}{x} \cdot \int_{x}^{-\pi} (t + \sqrt{t^2 + 2t}) dt$$

 $[\]overline{\ }^{1}$ Posting Date 10/22/07. Submit solutions to Noah Aydin, RBH 319 (e-mail or hard-copy, but hard copy submissions must include a time stamp) by 4 pm on 11/02/07.