

Problem 3: Does the Limit Exist?

Determine whether the following limit exists or not. If it does, find its value.

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

As always, show your work, fully explain and justify your answer.

Posting Date 9/23/2017. 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 10/05/2017.