Problem of the Week-6

Determine whether the following limits exist. If they do, find the values. Show your work and carefully justify your answer (justification is more important than answer itself)¹

1)
$$\lim_{x \to 0} \frac{\sqrt{|x|}}{|\sqrt{x+1}-1|}$$

2)
$$\lim_{x \to 0} \frac{|x|}{|\sqrt{x+1} - 1|}$$

 $^{^1\}mathrm{Posting}$ Date 11/4/07. 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 11/16/07.