Math 1B: Quiz 9

Name: _____

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You must always justify your answers. This means: show your work, show it neatly, and when in doubt, use words (and pictures!) to explain your reasoning. No justification = no points.

1. (5 pts) Determine whether the following series converges or diverges. You do not need to find the limit. You must specify which convergence test(s) you are using, and why the conditions for the test are satisfied.

$$\sum_{n=2}^{\infty} \frac{1}{n\sqrt{\ln n}}$$

2. (5 pts) Determine whether the following series converges or diverges. You do not need to find the limit. You must specify which convergence test(s) you are using, and why the conditions for the test are satisfied.

$$\sum_{n=1}^{\infty} \frac{2n-1}{n^3 + \arctan n}$$