Dennis Kuzminer CSCI-UA 310-001 PS1

4.

a.
$$\int_{1}^{\infty} \frac{1}{i^{1.1}} di \rightarrow -10(1/i^{.1}) \rightarrow -10(1/\infty^{.1}) - -10(1/1^{.1}) = 0 - 10 = 10$$

Because the integral converges, we can also say that the series converges.

b.
$$\int_{2}^{\infty} \frac{1}{iln(i)} di \rightarrow ln|ln(i)| \rightarrow ln|ln(\infty)| - ln|ln(2)| \rightarrow \infty - .3665 = Divergent.$$

Because the integral diverges, we can also say that the series diverges.