The quiz is scored out of 10 points.

- Series: for the following series, determine (with justification) whether the given series converges or diverges (2 points each).

$\sum\limits_{k=7}^{\infty}(-1)^k\dfrac{k}{\log k}$	$\sum\limits_{k=7}^{\infty}(-1)^k\dfrac{\log k}{k}$	$\sum\limits_{k=7}^{\infty}\dfrac{k!}{k^k}$	$\sum\limits_{k=7}^{\infty}(-1)^k\dfrac{k!}{k^k}$	$\sum\limits_{k=7}^{\infty}\dfrac{\sin(k)}{k^2}$

- (2 points) For which values of x does the power series $\sum\limits_{n=1}^{\infty}\dfrac{x^n}{n}$ converge?