

Answer all questions and show your work. Unsupported answers may receive *no credit*. You may not use a calculator on this quiz. Allow 15 minutes for the quiz.

Name: _____ Section: _____

1. (a) (5 points) Does the series $\sum_{n=3}^{\infty} \frac{n+2}{(n+1)^3}$ converge or diverge? Justify your answer!

- (b) (5 points) Does the series $\sum_{n=1}^{\infty} \frac{n!}{100^n}$ converge or diverge? Justify your answer!