



Take-Home Quiz 5

MATH 172 Lab: Sections 7 and 8

Lab Instructor (TA): Mohammed Kaabar

Due: Tuesday November 3rd, 2015

5

Student's Name:-----

Student's ID:-----

*Note: This quiz covers tests of convergence.***Show your work and circle your answers. Neatness and organization count!****Question 1:** (2 points) Determine if the series diverges or converges. Be sure to explain which test you use:

$$\sum_{w=1}^{\infty} \frac{2w^2 + 3w}{\sqrt{5 + w^5}}$$

Question 2: (3 points) Determine if the series diverges or converges. Be sure to explain which test you use:

$$\sum_{z=1}^{\infty} \frac{z^z}{3^{(1+3z)}}$$