

MATH 102-14 (102)  
QUIZ # 7

NAME: ..... ID. #: .....

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**Show all your work in a neat and organized manner**

Q1. Find a power series representation for the following function and determine the radius of convergence.

$$f(x) = \ln(5 - x)$$

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Q2. Find the radius of convergence and interval of convergence of the power series:

$$\sum_{n=1}^{\infty} \frac{(x-2)^n}{\sqrt{n}}$$