

Name _____

Quiz 1

1. Find the first 3 terms in the Taylor series expansion of

$$f(x) = \frac{1}{1 - x - x^2}.$$

2. Find the power series representation of

$$g(x) = \int e^{x^2} dx.$$

3. True or False:

a) $\sum_{n=0}^{\infty} 3^n x^n$ has radius of convergence $1/3$ _____

b) The series $\sum_{n=1}^{\infty} \frac{1}{n}$ is convergent _____