

MATH 117 SPRING 2001 FIRST QUIZ

CRISTIAN GURITA

Temple University

SOLVE THESE TWO LITTLE PROBLEMS:

**Problem 1.** *Is this series convergent, divergent or you cannot say? For full credit, GIVE A GOOD REASON.*

$$\sum_{k=1}^{\infty} \frac{k}{2^k}.$$

**Problem 2.** *Find the Taylor series at  $x = 0$  for the function:*

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