

MATH 102 - 14 (SPRING 2024)  
QUIZ 1

Full name: \_\_\_\_\_ Student number: \_\_\_\_\_

Total: \_\_\_\_ / 10 pts.

Determine whether the following series converges or diverges. If the series converges, find the sum; otherwise explain why it diverges.

(1)  $\sum_{n=1}^{\infty} \ln \left( \frac{n^2}{(n+1)^2} \right)$

(2)  $\sum_{n=0}^{\infty} 2^{n+1} 3^{-n}$

**Solution.**