

## Oniz # 04

Bilkent University	Math 102 Section 08 Calculus II  4 March 2024 Monday Instructor: Ali Sinan Sertöz	
Ž	Name & Lastname:	
Department:	Student ID:	

**Q-1**) Evaluate the series  $\sum_{n=1}^{\infty} (-1)^n \frac{n^2}{3^n}$ . Show your work in detail. Correct answers with no justification will not get any credit.

Hint: Start with the geometric series and construct an analytic function whose Taylor series looks like the above series, as we did in class! Grading: 10 points

**Solution:** (Grader: melis.gezer@bilkent.edu.tr)