

**QUIZ 4**

**1.** (3 points) List the first 4 terms of the sequence given by  $a_1 = 2$ ,  $a_{n+1} = a_n^2 + 1$

**2.** (3 points) Calculate  $\int_2^\infty \frac{1}{x^2 - 1} dx$ .

**3.** (4 points) Evaluate  $\sum_{n=2}^\infty \frac{1}{x^2 - 1}$ .