

You have 20 minutes to take this quiz. Each problem will be graded for clarity of work as well as correctness, so show all work **clearly and in order**. Circle or otherwise indicate your final answers. Please note that there are problems on both the front and the back of this page.

YOU MAY USE CALCULATORS ON THIS QUIZ, WITH THE USUAL RESTRICTIONS.

All of the problems on this quiz are similar to homework problems.

1. (10 points) Find the limit $\lim_{x \rightarrow \infty} \left(\cos \frac{1}{x} \right)^x$.

Turn over for more...

2. (10 points) Evaluate the integral $\int_{-\infty}^{\infty} \frac{1}{x^2} dx$.