

# Real Analysis qualifying review big list

Students at University of Michigan

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<a href="#">1 Uncategorized</a>	<b>1</b>
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## 1 Uncategorized

**Problem 1** (Date: September 2011, tags: ). Let  $f \in L_1([0, 1], dx)$ . Find

$$\lim_{n \rightarrow \infty} \frac{1}{n} \int_0^1 \log \left( 1 + e^{nf(x)} \right) dx.$$