

**Quiz (Week 17-12-2017 – 21-12-2017)** MATH-101, CALCULUS I  
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**Question 1.** Find the following limits:

(a)  $\lim_{x \rightarrow 0} x^2 \ln x$ .

(b)  $\lim_{x \rightarrow \infty} (x^2 - \log x)$ .

**Question 2.** Sketch the graph of  $\sin x + \cos x$ . Show your steps neatly.