This homework set has one (1) problem. It requires more thought. You are encouraged to work with others and to ask questions of your instructor; however, you must write up your solutions independently. On this and all subsequent homework sets please write neatly in complete sentences. Writing mathematics is a craft, aim to hone this skill!

1. Sum the series $\sum_{n=1}^{\infty} \frac{1}{n^2}$. 