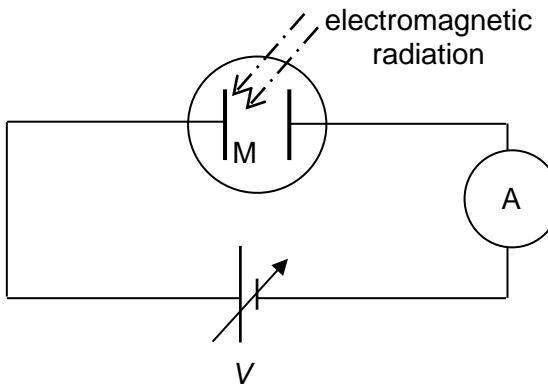


- 27 A 3.1 mW beam of electromagnetic radiation comprising photons each with energy 3.11 eV is incident on a clean metal plate M. The potential difference V is varied until the ammeter gives a maximum reading of 2.0 μA .



What is the ratio $\frac{\text{electrons emitted per unit time}}{\text{photons incident per unit time}}$?

A 3.2×10^{-22}

B 2.0×10^{-3}

C 1.0

D 1.3×10^{16}