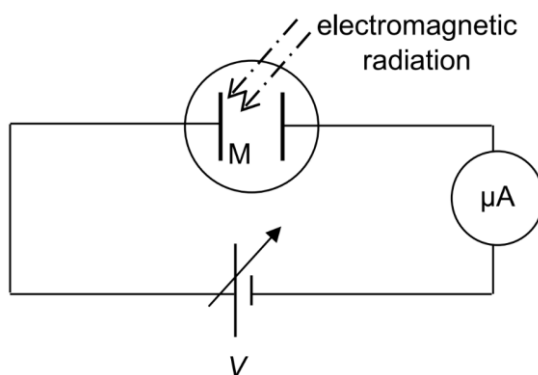


- 28 A 0.31 mW beam of electromagnetic radiation is incident on a clean metal plate M. Each photon of the electromagnetic radiation has energy 3.11 eV.

The potential difference V in the circuit is varied until the microammeter gives a maximum reading of $2.0\ \mu\text{A}$.



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

A 3.2×10^{-21}

B 2.0×10^{-2}

C 1.0

D 1.3×10^{17}

