

**28**

Electrons are only just emitted from a metal surface when illuminated with light of frequency  $4.0 \times 10^{14}$  Hz.

When illuminated with light of frequency  $f$ , the stopping potential is found to be 1.5 V.

What is the value of the frequency  $f$ ?

**A**

$$3.8 \times 10^{13} \text{ Hz}$$

**B**

$$3.6 \times 10^{14} \text{ Hz}$$

**C**

$$4.2 \times 10^{14} \text{ Hz}$$

**D**

$$7.6 \times 10^{14} \text{ Hz}$$