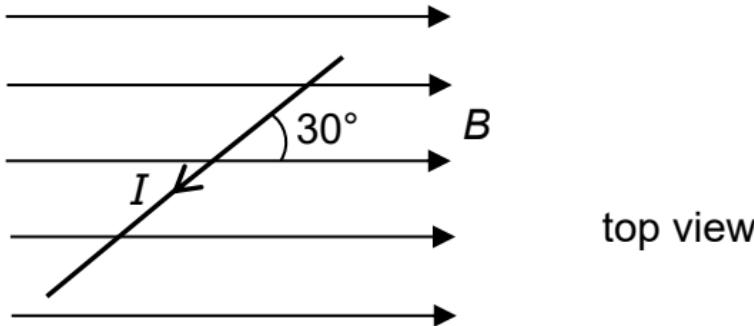


- 22** A wire 30 cm long with a mass of 4.0 g, is placed on a horizontal platform in a magnetic field of flux density 0.040 T. The diagram shows the top view of the set-up.

The current  $I$  in the wire is slowly increased until the wire starts to lift off from the platform when  $I = I_o$ .



What is value of  $I_o$ ?

**A** 3.3 A

**B** 6.5 A

**C** 33 A

**D** 65 A

- 23** A conducting rod of length  $l$ , is released from rest at the top of a smooth sloping surface