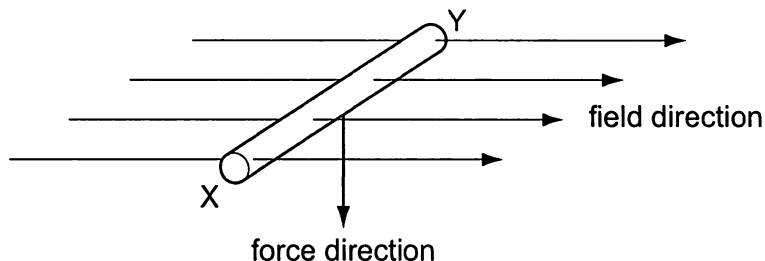


- 27 A current-carrying conductor is placed at right-angles to a uniform magnetic field of flux density 0.50 T. A 10 cm length of the conductor lies within the field and experiences a force of 2.4×10^{-2} N.



What is the magnitude and direction of the current in the conductor?

| | magnitude / A | direction |
|----------|---------------|-----------|
| A | 0.48 | X to Y |
| B | 0.48 | Y to X |
| C | 0.0048 | X to Y |
| D | 0.0048 | Y to X |