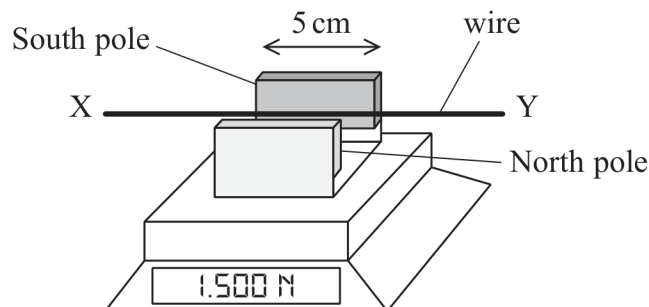8 A wire is held firmly in place between two magnets mounted on top of an electric balance as shown.

The reading on the balance is 1.500 N.

The magnetic flux density between the magnets is 0.07 T.
When the wire is connected to a circuit so there is a current in the wire, the reading on the balance is 1.503 N.

Which of the following gives the current in the wire in ampere and its direction?

☒ **A** $\dfrac{0.003}{0.07 \times 0.05}$ from X to Y

☒ **B** $\dfrac{0.003}{0.07 \times 0.05}$ from Y to X

☒ **C** $\dfrac{0.07 \times 0.05}{0.003}$ from X to Y

☒ **D** $\dfrac{0.07 \times 0.05}{0.003}$ from Y to X

(Total for Question 8 = 1 mark)