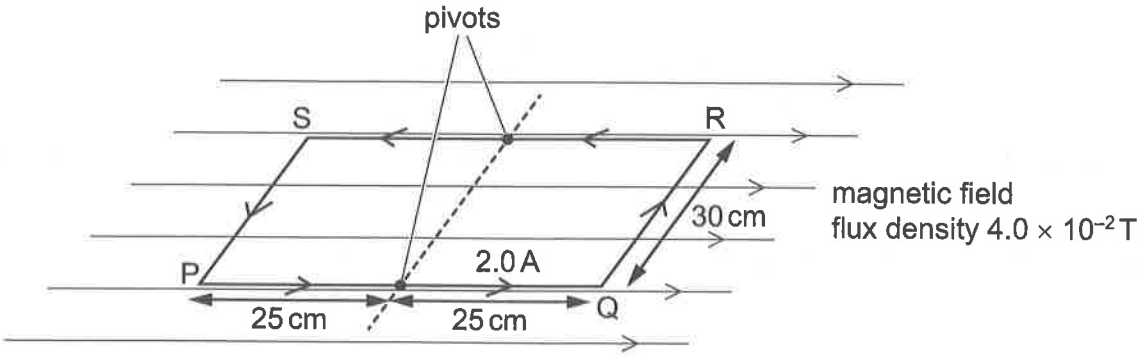
14 The diagram shows a horizontal, rectangular coil PQRS.



The coil consists of a single turn and rests on pivots that are at the midpoints of PQ and RS.

There is a current of 2.0 A in the coil. There is a horizontal, uniform magnetic field of flux density 4.0×10^{-2} T parallel to PQ.

What is the magnitude of the torque acting on the coil?

A 0 N m

B 6.0×10^{-3} N m

C 1.2×10^{-2} N m

D 2.4×10^{-2} N m