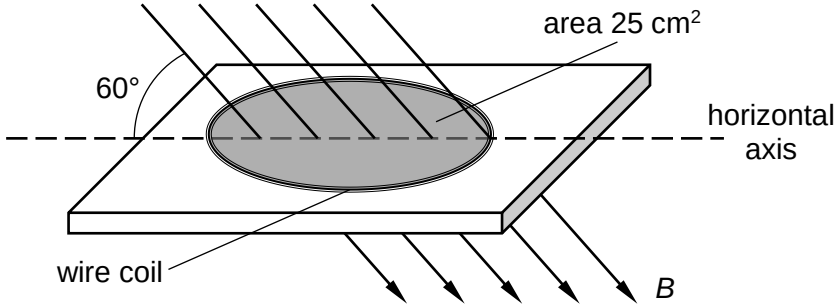
23 A uniform magnetic field of magnetic flux density $B = 2.0 \times 10^{-4}$ T is directed down through a wire coil at an angle of 60° with the horizontal as shown. The coil has 500 turns, a total resistance 5.0 Ω and an area of 25 cm^2.



What is the average charge that flows when the coil is turned π rad about the horizontal axis?

A 0.22 C
B 0.11 C
C 4.3×10^{-5} C
D 8.7×10^{-5} C