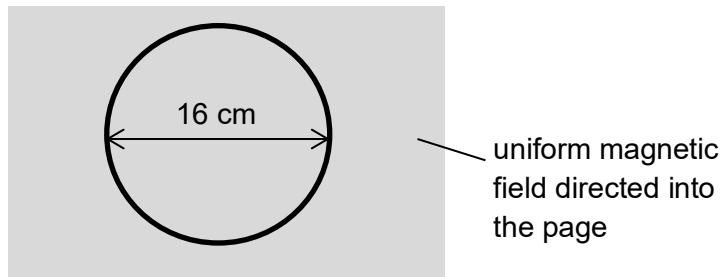


**24**

A circular ring of diameter 16 cm and resistance 4.0  $\Omega$  is placed in a uniform magnetic field of flux density 5.0 T directed perpendicularly into the ring.



If the magnetic flux density is reduced to zero at a constant rate over 10 ms, what can be deduced about the current flowing in the ring during this change?

magnitude of current / A

direction of current

**A**

2.5

clockwise

**B**

2.5

anti-clockwise

**C**

10

clockwise

**D**

10

anti-clockwise