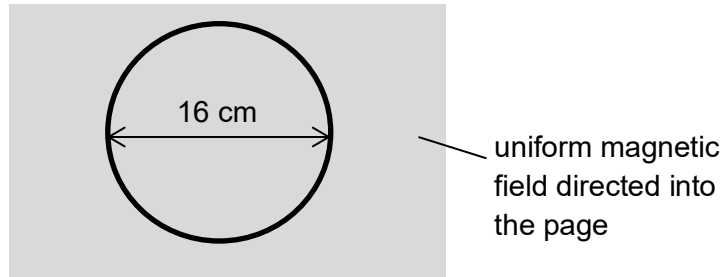


24

A circular ring of diameter 16 cm and resistance $4.0\ \Omega$ is placed in a uniform magnetic field of flux density $5.0\ \text{T}$ 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