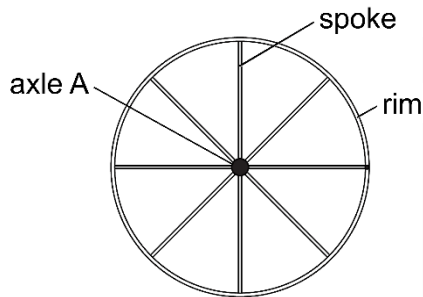


26 A metal wheel consists of an axle A, eight spokes and a rim as shown.



The rim has a radius of 0.65 m and the wheel rotates with an angular speed of 120 rad s^{-1} . There is a uniform magnetic field of flux density 0.23 T perpendicular to the plane of the page.

What is the magnitude of the e.m.f. induced across each spoke?

A 2.9 V

B 5.8 V

C 12 V

D 18 V

[Turn over]