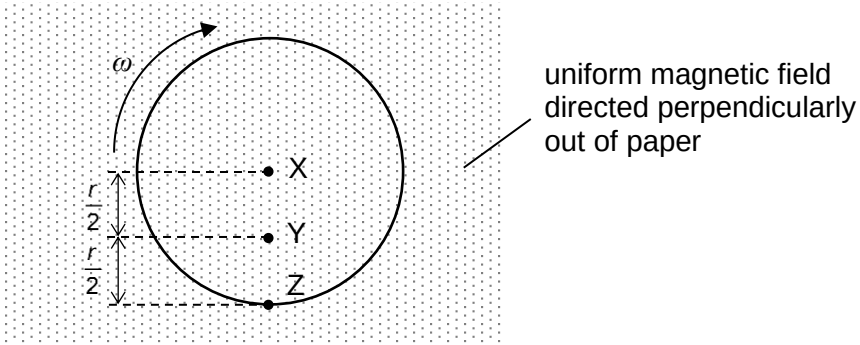
26 A metal disc of radius r rotates about its centre X at a constant angular speed ω in a uniform magnetic field. Point Z is on the rim of the disc and point Y is a distance $\frac{r}{2}$ from point X.



The potential difference between X and Z is V.

What is the potential difference between X and Y?

A 0 **B** $\frac{1}{4}V$ **C** $\frac{1}{2}V$ **D** $\frac{3}{4}V$