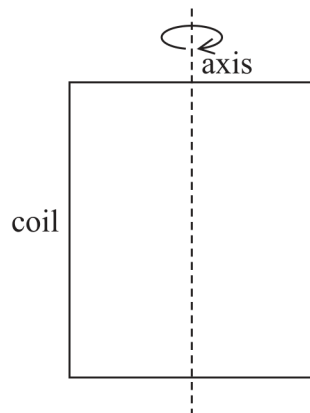5   The diagram shows a rectangular coil of N turns. The coil rotates around an axis as shown. A magnetic field acts perpendicular to the plane of the coil in the position shown.

The magnetic flux linkage with the coil is $N\phi$. The coil is rotated through an angle of π radians.

Which of the following is equal to the change in magnetic flux linkage with the coil?

☒ **A** 0

☒ **B** $N\phi/2$

☒ **C** $N\phi$

☒ **D** $2N\phi$

(Total for Question 5 = 1 mark)