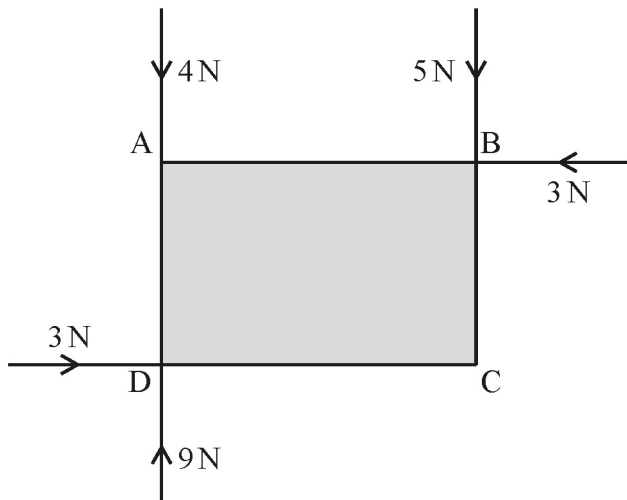


7

A rectangular book ABCD rests on a smooth horizontal table. The length of AB is 28 cm and the length of AD is 18 cm. The following five forces act on the book, as shown in the diagram.

- 4 N at A in the direction AD
- 5 N at B in the direction BC
- 3 N at B in the direction BA
- 9 N at D in the direction DA
- 3 N at D in the direction DC



- (a) Show that the resultant of the forces acting on the book has zero magnitude. [2]
- (b) Find the total moment of the forces about the centre of the book. Give your answer in Nm. [3]
- (c) Describe how the book will move under the action of these forces. [2]