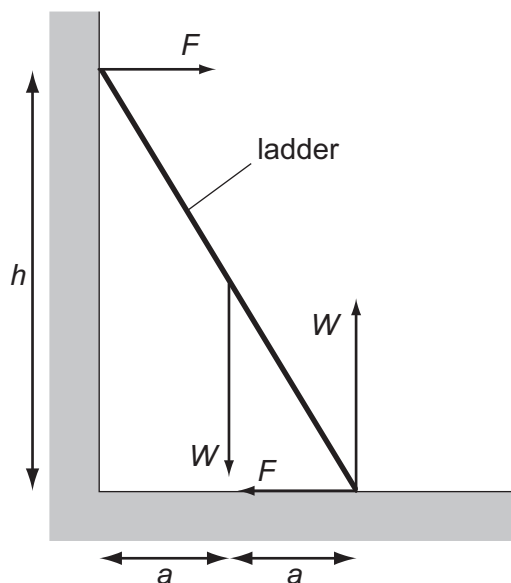


- 12 A uniform ladder rests against a vertical wall where there is negligible friction. The bottom of the ladder rests on rough ground where there is friction. The top of the ladder is at a height  $h$  above the ground and the foot of the ladder is at a distance  $2a$  from the wall.

The diagram shows the forces that act on the ladder.



Which equation is formed by taking moments?

- A  $Wa + Fh = 2Wa$
- B  $Fa + Wa = Fh$
- C  $Wa + 2Wa = Fh$
- D  $Wa - 2Wa = 2Fh$

**Space for working**