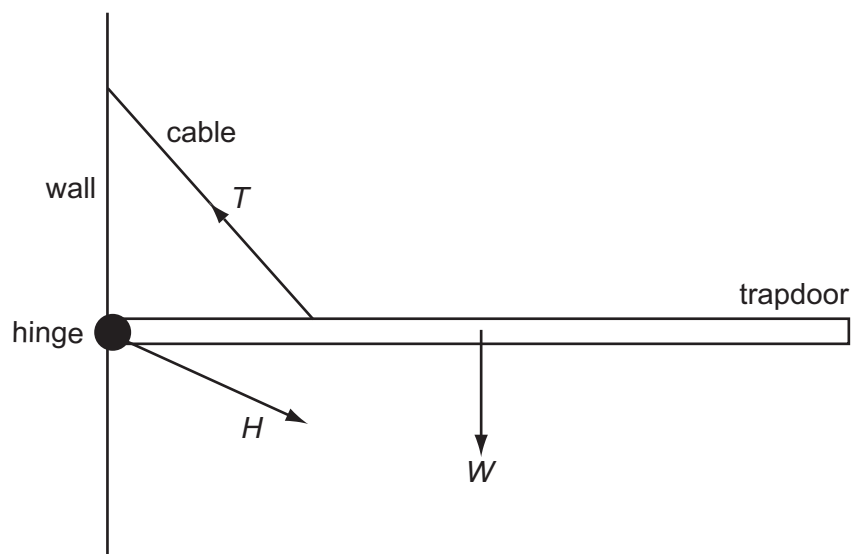


**16** A hinged trapdoor is held closed in the horizontal position by a cable.

Three forces act on the trapdoor: the weight  $W$  of the door, the tension  $T$  in the cable and the force  $H$  at the hinge.



Which list gives the three forces in **increasing** order of magnitude?

**A**  $H, T, W$

**B**  $T, H, W$

**C**  $W, H, T$

**D**  $W, T, H$

**Space for working**