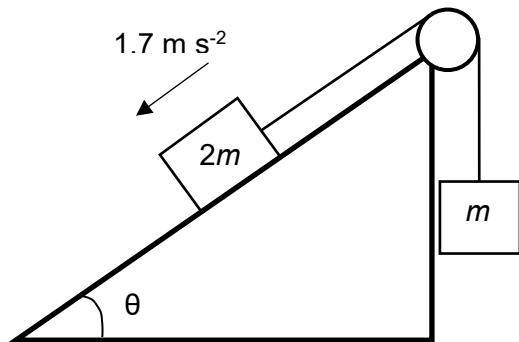


- 5 The diagram shows two blocks of mass  $m$  and  $2m$  connected by a light inextensible cord passing over a light, free-running pulley. At what angle  $\theta$  must the smooth slope be inclined such that the block with mass  $2m$  accelerates down the slope at  $1.7 \text{ m s}^{-2}$ ?



A  $14^\circ$

B  $41^\circ$

C  $49^\circ$

D  $76^\circ$