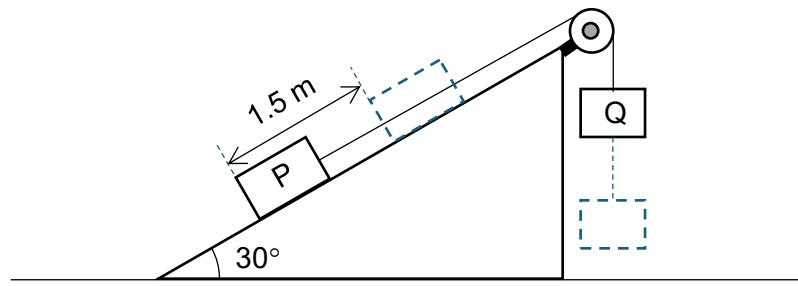


- 7 Two bodies, P and Q, of masses 3.0 kg and 4.0 kg respectively, are connected by a light cord passing over a light, frictionless pulley. P is held at rest on a rough slope inclined at 30° to the horizontal as shown.



When P and Q are released, P experiences a constant frictional force of 2.5 N.

What is the total kinetic energy of P and Q when P has travelled 1.5 m up the slope?

A 11 J

B 18 J

C 33 J

D 41 J