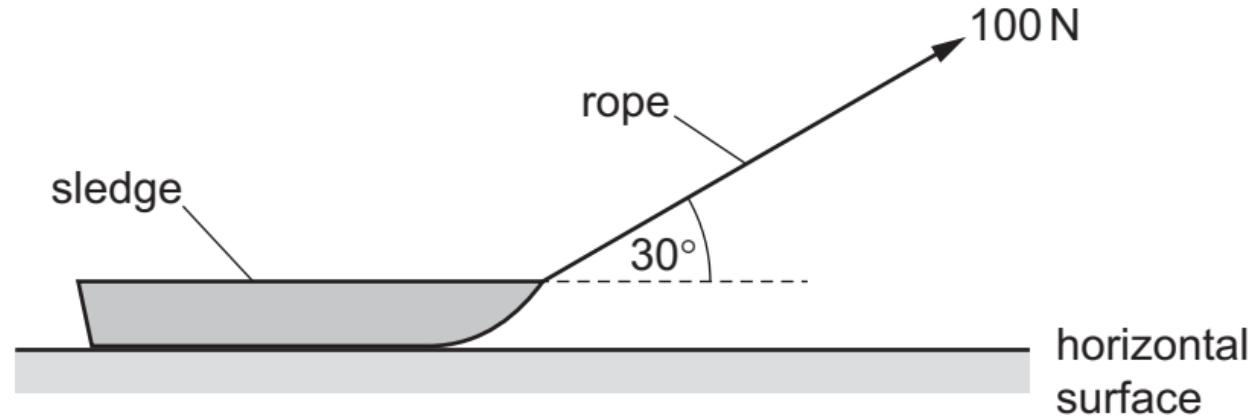


- 17 A rope is attached to a sledge and a boy uses the rope to pull the sledge along a horizontal surface with a constant velocity. The tension in the rope is 100 N and the rope is held at  $30^\circ$  to the horizontal.



How much work does the boy do on the sledge when he pulls it a distance of 5.0 m along the surface?

A 250 J

B 290 J

C 430 J

D 500 J