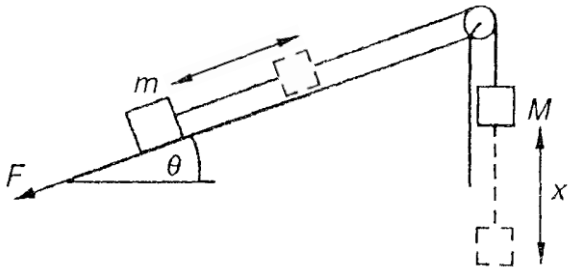
7 A mass m moves on a rough plane inclined at an angle θ to the horizontal and, when moving, experiences a constant frictional force F. Mass M is attached to it by means of a light inelastic cord running over a smooth pulley. Mass M is allowed to fall a vertical distance x, causing m to move up the plane as shown.



How much heat is generated by friction in this process?

A Fx

B $mgx\sin\theta$

C $mgx\sin\theta - Fx$

D $mgx\sin\theta + Fx$