

Quiz

A block of mass m slides down an inclined plane with coefficient of friction μ . If the block starts from rest at a height H , how fast will it be moving at bottom of ramp?

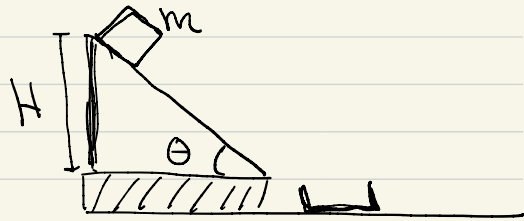
(a) $\sqrt{2gH}$

(b) $\sqrt{2gH(1-\sin\theta)}$

(c) $\sqrt{2gH(1-\cos\theta)}$

(d) $\sqrt{2gH(1-\cot\theta)}$

(e) None of above



Quiz

If the block lands on a cart of mass M_1 and the two slide together along a frictionless track, what will be their speed? Let v_0 denote your answer to the previous question.

(a) $\frac{m}{m+M_1} v_0$

(b) $\frac{M_1}{m+M_1} v_0$

(c) $\frac{m}{m+M_1} v_0 \sin\theta$

(d) $\frac{m}{m+M_1} v_0 \cos\theta$

(e) None of above

