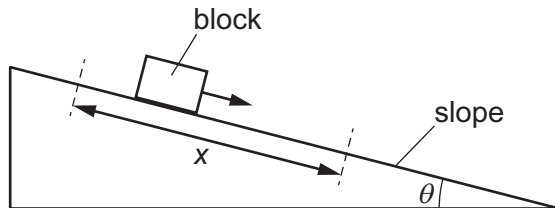


17 A block is released from rest and slides a distance x down a straight slope.

The slope is at an angle θ to the horizontal.



The slope is frictionless and air resistance is negligible.

The acceleration of free fall is g .

Which expression gives the final speed of the block?

A $\sqrt{\frac{gx \sin \theta}{2}}$

B $\sqrt{2gx \sin \theta}$

C $\sqrt{2gx}$

D $2gx \sin \theta$