Velocity at the Bottom of Rough Wedge.

A body of mass m which is placed at the top of the wedge (of height h) starts moving downward on a rough inclined plane.

Loss of energy due to friction = FL (Work against friction)

PE at point $A = mgh$

KE at point $B = \dfrac{1}{2}mv^2$

By the law of conservation of energy

i.e. $\quad \dfrac{1}{2}mv^2 = mgh - FL$

$$v = \sqrt{\dfrac{2}{m}(mgh - FL)}$$