Homework # 5 Pract A

A block of mass m is initially released at time $t = 0$ from rest at the top left corner of the ramp. The ramp is oriented at angle θ. The top part of the ramp is frictionless. Then, after time $t = t_f$, the block reaches an a portion of the ramp with friction. The coefficients of kinetic and static friction μ_k and μ_s. Given the quantities listed above, at what time does the block come to a stop?