

## 1 Inelastic Collision

A particle of mass  $m_1$  and velocity  $u_1$  collides with a particle of mass  $m_2$  which was at rest. The two particles stick together. What fraction of the original kinetic energy is lost in the collision? Simplify your result.

Hint: What is  $\frac{T_i - T_f}{T_i}$ ? Momentum is conserved.