Maximum Height of Jimmy in meters.

given values. final time = .833

find initial velocity given peak time and final velocity.

max height = $V_1$ of max height

$V_1$ = max heigh at 0.2 seconds.

$(9.81)(.2) = 1.962$ m/s.

$\Delta Y = V \cdot T + \frac{1}{2} g T^2$

$\Delta Y = (1.962)(2) + \frac{1}{2}(-9.81)(.2)^2 = \boxed{.1962 \text{ meters}}$

$\Delta Y = (.1962)\Delta T$

$T = 0.833$ seconds.

$.833 - .2 = .633$ seconds

$\Delta X = V_0 T + \frac{1}{2} g T^2$

$\Delta X = (-1.962)(.633) + \frac{1}{2}(-9.81)(.633)^2$

$-3.207$

$= \Delta y = 0.1962 + |-5.173|$

$\boxed{\Delta Y = 5.37 m}$