Free Fall Activity

A ball is thrown vertically up into the air with an initial velocity of 20.0 m/s upward. Find:

a) The maximum height of the ball

b) Velocity of the ball at 1.4 seconds

c) Position of the ball at 2.7 seconds

d) Total time the ball is in the air

e) Velocity at maximum height

f) Acceleration at maximum height

g) Time that the ball has a speed* of 8.0 m/s

h) Displacement of the ball at 2.5 s

i) Distance* traveled in 2.5 s

j) The acceleration of the ball at 1 s