RIDDLE NAME ______ CALCULUS POSIITON, VELOCITY, AND ACCELERATION

A dynamite blast blows a heavy rock straight up with a launch velocity of 160 ft/sec (about 109 mph). It reaches a height of $s(t) = 160t - 16t^2$ ft after t seconds.

a) Draw a diagram illustrating the movement of the rock.

b) How high does the rock go?

c) How long is it in the air?

d) How fast is the rock going when it is 256 feet above the ground?