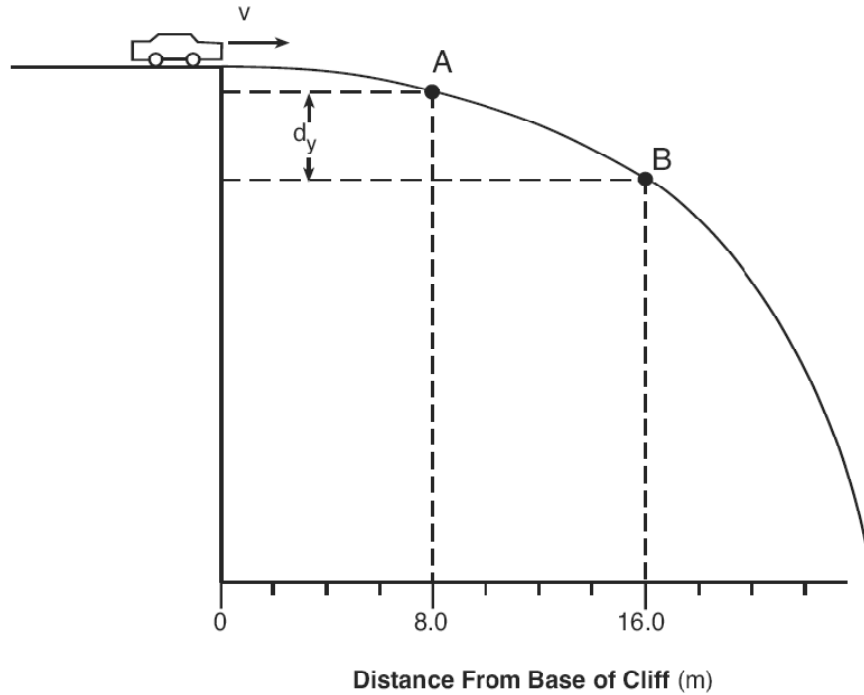# Physics 8

Base your answers to questions 60 through 62 on the information below.

The path of a stunt car driven horizontally off a cliff is represented in the diagram below. After leaving the cliff, the car falls freely to point A in 0.50 second and to point B in 1.00 second.

Distance From Base of Cliff (m)

60 Determine the magnitude of the horizontal component of the velocity of the car at point B. [Neglect friction.] [1]

61 Determine the magnitude of the vertical velocity of the car at point A. [1]

62 Calculate the magnitude of the vertical displacement, d_y, of the car from point A to point B. [Neglect friction.] [Show all work, including the equation and substitution with units.] [2]