

Quiz 13

MATH 139-01 and -02
Thursday, October 30, 2003

Be sure to **show your work**. Unsupported answers receive no credit.

1. A ball is dropped from the top of a 100-foot building, and its speeds at various times are given in the table.

t (s)	0	1	2	3	4
$v(t)$ (ft/s)	0	9.8	19.6	29.4	39.2

- (a) Estimate how far the ball fell in this time. Use upper and lower estimates and an average of the two.

- (b) Can you determine whether the ball hit the ground at or before $t = 4$? Support your answer!