

Quiz #27

Name: Key*You must show your work to get full credit.*The speed, v , of a runner is given as a function of time, t , in the following table.

t in sec	0.0	.5	1.0	1.5	2.0
v in m/sec	3.1	2.5	2.1	1.7	1.4

Assuming the speed is decreasing find the following:

1. An upper bound for the distance she covered.

$$.5(3.1 + 2.5 + 2.1 + 1.7) = 4.7$$

4.7 ft

2. A lower bound for the distance she covered.

$$.5(2.5 + 2.1 + 1.7 + 1.4) = 3.85$$

3.85 ft

3. A best guess at the distance covered.

4.275

The average of the two above.

$$\frac{4.7 + 3.85}{2} =$$