For the week of September 01-05

1) A snail crawls up and down a stick. Its velocity $v(t)$, measured in $cm$ per minute, is given in the table below.

| $t$ | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $v(t)$ | 16 | -4 | -2 | 9 | 22 | 23 | 11 | 0 | -12 | -12 | -1 | 6 | 17 |

Use the information in the table to write a Riemann sum that approximates the

a) total distance travelled by the snail in the first 60 minutes. Your Riemann sum should use 4 rectangles and left endpoints.

b) net distance travelled by the snail in the first 60 minutes. Your Riemann sum should use 3 rectangles and right endpoints.

2) A car is standing at a traffic light. When the light turns green, the car's