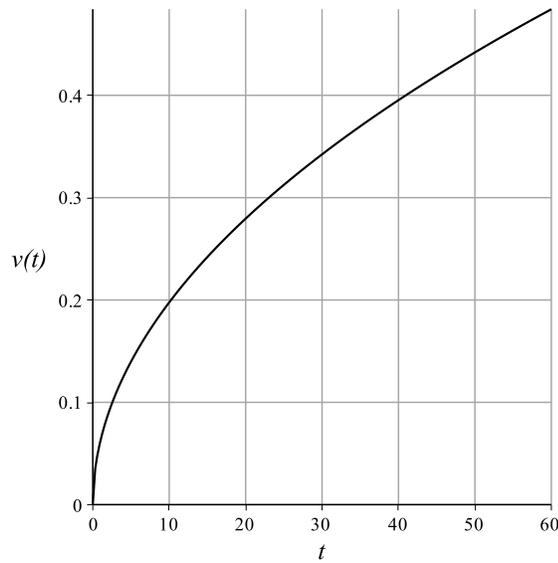


**Example 1.** Suppose the table below shows the velocity of a car, at 10 minute intervals. Find an upper estimate and a lower estimate for the distance the car has travelled.

$t(\text{min})$	0	10	20	30	40	50	60
$v(t)(\text{mph})$	0	22	38	35	37	32	29

**Example 2.** Show below is the graph of the velocity  $v(t)$  of a car, where  $t$  is minutes and  $v$  is in miles per minute.



- (a) Find a lower estimate for the distance the car travels in the first hour.
- (b) Interpret the distance the car travels in terms of the graph of  $v(t)$ . Do this both for the estimate calculated in part (a) and for the actual distance the care travelled.