## Mathematics 122

$\qquad$

The speed of a car is increases steadily for an hour. The speed of the car is measured every fifteen minutes and in the following table.

$$
\begin{array}{r|ccccc}
\text { Time in minutes } & 0 & 15 & 30 & 45 & 60 \\
\hline \text { Velicity in mph } & 20 & 25 & 30 & 35 & 40
\end{array}
$$

(Note that the speed is in miles per hour and that the time is given in minutes. So you should changes the minutes to hours. That is 15 minutes $=.25$ hours etc.)
(1) Give a lower bound for the distance the car has traveled in the hour.

Lower bound $=$ $\qquad$
(2) Give an upper bound for the distance the car has travel in the hour.

$$
\text { Upper bound }=
$$

$\qquad$
(3) What is the best guess for the distance covered by the car in the hour?

