## Intellectual Need Task for Optimization (Introduction)

Below is a table that shows the fuel economy of a car driving at different speeds.

| Speed (miles per hour) | Fuel economy (miles per gallon) |
| :---: | :---: |
| 45 | 43 |
| 50 | 44 |
| 55 | 45 |
| 60 | 41.5 |
| 65 | 38 |
| 70 | 35 |
| 75 | 32 |

How fast should you drive a car to use fuel as efficiently as possible?

1. 45 miles per hour
2. 50 miles per hour
3. 55 miles per hour
4. 60 miles per hour
5. 65 miles per hour
6. 70 miles per hour
7. 75 miles per hour
8. None of the above
9. You can't tell without more information
