

Speed, Distance, and Time

This problem may appear difficult at first, but once one thinks it through, and then understands how things work, it is very easy. So, be sure to take some time to think about what is going on before jumping at it.

The problem – Suppose you are going down the road in a car going 60 miles per hour. How long will it take you to go 8 miles?

One could attack this by making a bunch of ratios of speed, time, and distance. This would work if done correctly, after a few calculations.

Think about 60 miles per hour.

An alternate, and equivalent way to think of this would be
60 miles per hour is the same as 60 miles per 60 minutes.

60 miles per 60 minutes is the same as 1 mile per minute. Think about it.

So then, at 1 mile per minute, it would take 8 minutes to go 8 miles.

One could easily extend this to more difficult problems like at 60 miles per hour, how long would it take to go 100 miles?

Or, one could turn the problem around. If you are going 60 miles per hour, how long would it take you to go 50 miles?

The real problem now would be could you hold the car speed at 60 miles per hour for 50 minutes?