

MATH PROBLEM OF THE MONTH (October)

The odometer of a family car shows 15 951 miles driven. The driver noticed that this number is a palindrome (it reads the same both forwards and backwards). Surprised, the driver saw his third palindromic odometer reading (not counting 15 951) exactly 5 hours later. If the car is being driven at a constant speed, what is that speed in miles per hour that the car traveled at over the 5 hour period?

Solution

The first digit of 15 951 would not change in 5 hours. So, the next three palindromic numbers are 16 061, 16 161, and 16 261. Thus the car travelled 310 miles in 5 hours and its speed would be $310/5 = \mathbf{62 \text{ miles per hour}}$.