



Problem of the Week

Problem B and Solution

Need for Speed?



Source: carcabin.com

Problem

Toonces was driving his 1992 Tabby Car down the road at an average speed of 60 km/h. When he was 10 km from the end of the road, he was passed by his friend, Hector Gonzalez. Toonces' cat-like senses told him that Hector's car was going 15 km/h faster than he was.

- How many minutes will it take Toonces to go the last 10 km?
- How many minutes will it take Gonzalez to go the last 10 km?
- How much time will speedy guy Gonzalez save compared to Toonces over that last 10 km stretch of the road?

Solution

- Toonces drives 60 km/h, or 1 km/min. Thus it will take him 10 minutes to drive 10 km.
- Hector Gonzalez drives $60 + 15 = 75$ km/h, or 1.25 km/min. Thus it will take him $10 \div 1.25 = 8$ minutes to go 10 km.
- Speedy guy Gonzales will save $10 - 8 = 2$ minutes compared to Toonces on that 10 km stretch of road.

