

Challenging Problems

Answer each of the following questions. Show your work and write your statements clearly.

13. Janet and Cindy travelled from town M to town N at uniform speeds of 95 km/h and 104 km/h respectively, at the same time. Some time later, they were 15 km apart. How long had they been travelling?
14. Edwin and Winston set off town X to town Y at uniform speeds at the same time. When Edwin reached town Y, Winston was still 210 km away. 3 hours later, Winston also reached town Y. If the two towns were 560 km apart, at what speed was Edwin travelling?
15. Henry and Tom started driving from the same place but in opposite directions along a straight road. 4 hours later, they were 680 km apart. If Henry was driving at an average speed of 65 km/h, at what average speed was Tom travelling?

16. Andy travelled from town P to town Q at an average speed of 80 km/h. One hour later, Mike also travelled from town P to town Q at an average speed of 100 km/h. If Mike reached town Q $4\frac{1}{2}$ hours later, how far away was Andy from town Q then?