



Gordon Burgin's Puzzles

September 2021 challenge

1. 25 drag racers come to the track to determine the top 3 cars by speed. Unhappily all the timing mechanisms are broken, so the races must be determined, head-to-head. Now the track has 5 lanes, and so 5 cars can race at a time. The question is what is the minimum number of races to determine the top 3 drag racers?
2. What is the distance from town A to town G, if town A is eleven miles north of town B, town B is eight miles east of town C, town D is seven miles south of town C, town E is five miles west of town D, town F is three miles north of town E and town F is seven miles east of town G?
3. Two types of tickets were sold for a concert held at an amphitheatre. Tickets to sit on a bench during the concert cost £75 each, and tickets to sit on the lawn during the concert cost £40 each. Organizers of the concert announced that 350 tickets had been sold and that £19,250 had been raised through ticket sales alone. What number of tickets were sold for the concert's bench seats (B), and for the lawn seats, (L)?
4. A dress on sale in a shop is marked at £65. During the discount sale its price is reduced by 15%. Staff are allowed a further 10% reduction on the discounted price. If a staff member buys the dress, what will she have to pay?