

2025 August AMC 10 Week 2 Day 1 - Distance Word Problems 1

- 1 Place A and Place B were 71 km apart. Calvin and Yvonne departed from the two places respectively and travelled towards each other. Calvin started his journey 20 minutes later than Yvonne, but he travelled faster than Yvonne by 3 km/h . The two of them came across each other two hours after Calvin's departure from Place A . Calvin travelled at () km/h .

A. 15 B. 16 C. 17 D. 18 E. 19

- 2 The ratio of the speed of train A to that of train B was $5 : 4$. Train B departed first and travelled from station B to station A . When it was 72 km away from station B , train A left station A for station B . The two trains met each other at point X . The ratio of the distance between point X and station A to that between point X and station B was $3 : 4$. The distance between station A and station B was () km .

A. 300 B. 305 C. 315 D. 330 E. 335

- 3 Andy was training on a circular track 400 meters long. After completing the first lap, he felt that his performance was not ideal. So he increased his speed by 15% , and as a result, he finished the lap 9 seconds faster than in the first lap. How many seconds did it take him to run the first lap?

A. 68 B. 69 C. 70 D. 71 E. 72

- 4 The distance between A and B is 500 km . Two people, A and B , set out at the same time from A to B on bicycles. Person A rides 30 km per day, while person B rides 50 km per day but rests every other day. At the end of the ____ day, the distance from B for person B is twice the distance from B for person A .

A. 13 B. 14 C. 15 D. 16 E. 17

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On a circular track, 2015 flags are placed at equal intervals. Person A and person B start at the same time from the same flag, running in the same direction. When they both return to the starting point together again, A has run 23 laps and B has run 13 laps. Excluding the starting flag position, how many times does A overtake B exactly at a flag position?

A. 1

B. 2

C. 3

D. 4

E. 5