

Math in Sports Competition

1 (1分) Five teams compete in a single round-robin tournament, where each pair of teams plays one match. Question: How many matches does each team play, and how many matches are played in total?

- A. 3 , 9 B. 4 , 9 C. 4 , 10 D. 3 , 10

2 (1分) Think Academy organized 8 students to play a badminton tournament in the stadium. They are paired two-by-two in a knockout format, and a champion needs to be determined among the 8 players. Question: How many matches will be played in total?

- A. 1 B. 2 C. 4 D. 7

3 (1分) Peter, Emma, and Kyler played chess with each other. Peter won 4 games and lost 2 games. Emma won 3 games and lost 3 games. If Kyler lost 3 games, how many games did he win? (2017 AMC 8 Problems, Question #13)

- A. 0 B. 1 C. 2 D. 3 E. 4

4 (1分) Four soccer teams play a single round-robin tournament, where each pair of teams plays one match. If the match ends in a draw, each team receives 1 point; otherwise, the winning team receives 3 points and the losing team receives 0 points. It is known that the scores of Teams A, B, C, and D are 7 points, 4 points, 4 points, and 1 point respectively. Question: How many matches ended in a draw?

- A. 2 B. 3 C. 4 D. 6

5 (1分) Five students A, B, C, D, and E play a tournament in which every pair of students plays one match. In each match, the winner receives 2 points, if the match ends in a draw each player receives 1 point, and the loser receives 0 points. After all matches are finished, the total points

of A, B, C, and E are 8, 5, 2, and 2 respectively. Question: How many points did student D score?

A. 0

B. 1

C. 2

D. 3