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Quick Question

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Quick Question

2/2 points (graded)

Suppose that you are trying to schedule 3 games between 6 teams (A, B, C, D, E, and F) that will occur simultaneously. Which of the following are feasible schedules? Select all that apply.

✓ A plays B, C plays D, and E plays F ✓
A plays C, B plays D, and C plays F
A plays F, B plays E, and C plays D
A plays B, B plays C, and C plays D
A plays D, B plays E, and C plays F



Explanation

Each of the teams has to play exactly one of the other teams for the games to occur simultaneously. In the second option, C is playing twice, which is impossible. In the fourth option, B and C are both playing twice.

How many different feasible schedules are there?

0 5

0 10		
● 15		
O 20		
0 25		

Explanation

There are 15 different feasible schedules. We can count them by observing that A can play any of the 5 teams. Once this is fixed, we have 4 teams left. There are 3 ways to make two pairs out of 4 teams. So in total, there are 5*3 = 15 different schedules. Here is a list of all of them:

A plays B, C plays D, E plays F A plays B, C plays E, D plays F A plays B, C plays F, D plays E A plays C, B plays D, E plays F A plays C, B plays E, D plays F A plays C, B plays F, D plays E A plays D, B plays C, E plays F A plays D, B plays E, C plays F A plays D, B plays F, C plays E A plays E, B plays C, D plays F

A plays E, B plays D, C plays F

A plays E, B plays F, C plays D

A plays F, B plays C, D plays E

A plays F, B plays D, C plays E

A plays F, B plays E, C plays D

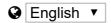
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You have used 1 of 2 attempts

1 Answers are displayed within the problem

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