

Game 35 – Junior High Dance

A DJ will play exactly seven songs—F, G, H, J, K, L and M—at a junior high dance. The songs will be played one at a time and no song will be played twice. The order in which the songs will be played is governed by the following conditions:

K is played immediately after L.

Either G or L is played fourth.

M must be played immediately after J.

F must be one of the first three songs played.

K cannot be played either immediately before or immediately after G.

1. Each of the following could be the first song played at the dance EXCEPT

A. J
B. G
C. H
D. M
E. L

2. If L is played immediately after M at the dance, then each of the following must be true EXCEPT

A. F is played first
B. M is played third
C. L is played fourth
D. H is played fifth
E. G is played seventh

3. Which one of the following could be true?

A. K is the third song played.
B. L is the fifth song played.
C. L is the seventh song played.
D. M is the fifth song played.
E. J is the third song played.

4. If H is played second at the dance, then which one of the following must be played fifth?

A. G
B. J
C. F
D. K
E. M

5. If M is the sixth song played at the dance, then K must be played

A. second
B. third
C. fourth
D. fifth
E. seventh

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1. D
2. D
3. B
4. D
5. A

This is a good example of an "anchor"—you have three rules about where the elements are relative to each other, and then one rule about what is in the middle of the system. In this case, one way to do it might be to draw the G or L in the middle and put three spots on either side. Again, don't get trapped in the "1, 2, 3" columns.

Question 1 is D because M must follow J. On the second question, you can deduce that L must be in fourth because if G is fourth, there is no place for the ensuing "JMLK" block in the question. This allows you to deduce everything else. On Question 3, you can exclude four answers on the basis of the K and L block rule and the G or L fourth rule.

Question 4 you can deduce that L must be fourth. If G is fourth and H is second, there is no room for the two blocks of MJ and LK. For Question 5, M in sixth places J in fifth, which places G in fourth, and L and K in first and second, since K cannot be next to G.