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The Islands Puzzle

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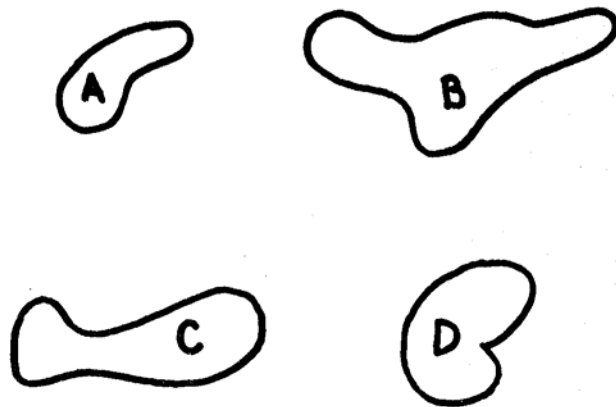
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The Islands Puzzle

The puzzle is about Islands A, B, C and D in the ocean. People have been traveling among these islands by boat for many years, but recently an airline started in business. Carefully read the clues about possible plane trips at present. The trips may be direct or include stops and plane changes on an island. When a trip is possible, it can be made in either direction between the islands. You may make notes or marks on the map to help use the clues.



First Clue: People can go by plane between Islands C and D.

Second Clue: People cannot go by plane between Island A and B, even indirectly.

Use these two clues to answer Question 1. Do not read the next clue yet.

Question 1: Can people go by plane between Island B and D?

Yes _____ No _____ Can't tell from the two clues _____

Please explain your answer.

Third Clue: (Do not change your answer to Question 1 now) People can go by plane between Island B and D.

Use all three clues to answer Question 2 and 3.

Question 2: Can people go by plane between Island B and C?

Yes _____ No _____ Can't tell from the three clues _____

Please explain your answer.

Question 3: Can people go by plane between Island A and C?

Yes _____ No _____ Can't tell from the three clues _____

Please explain your answer.

Island Puzzle - Students' Responses

Student A1 John Blake (16)

1. Answer: Can't tell from the two clues.
 Explanation: You don't know why you can't go from island to island.
2. Answer: yes
 Explanation: They can't go to Island B from Island C, then on to Island D.
3. Answer: Can't tell from the two clues.
 Explanation: You can't go from Island A to Island B. You don't know if you can go directly to A from C."

Student A2 Deloris Johnson (19)

1. Answer: Can't tell from the two clues.
 Explanation: "There was no information given concerning the two.
2. Answer: Yes
 Explanation: "They can fly from C to D, have a lay over and catch the plane from D to B."
3. Answer: No
 Explanation: "It was said you cannot go from A to B. There is no information about a flight direct from C to A - only C to D."

Student A3 (College Student - Age 17)

1. Answer: Can't tell from the clues given.
 Explanation: The two cues don't relate the upper islands to the lower ones.
2. Answer: Yes.
 Explanation: They can go from B to D and then to C, even if there are no direct flights.
3. Answer: No.
 Explanation: If they could go from C to A, then the people on B could go first to D, then to C, and then on to A. But this contradicts the second clue, that they can't go by plane between B and A.

Student A4 David Kenting (19)

1. Answer: Can't tell from the two clues.
 Explanation: By information given they could if appropriate landing facilities were on Island B.
2. Answer: Yes
 Explanation: "Yes, because planes go from C to D or vice versa & B to D and vice versa. Therefore all have facilities."
3. Answer: No
 Explanation: "No, because Island A has no landing facilities mentioned."

Student A5 Norma Kuhn (20)

1. Answer: Yes
Explanation: "If the trip from C to D includes a stop on B. The clues only state that one cannot go by plane between A and B. The introduction states that the flights need not be direct."
2. Answer: Yes.
Explanation: "Via D"
3. Answer: Can't tell from the three clues.
Explanation: "The clues do not give any connections to A except via boat."

Student A6 Barbara Downing (21)

1. Answer: Can't tell from the two clues.
Explanation: "The clues tell nothing of the relation of B and D."
2. Answer: Yes
Explanation: "If you can go from C to D and D to B, C to B should also be possible."
3. Answer: No
Explanation: "If you can go from C to B, but not B to A, you should not be able to go from C to A."

Student B1 (High School Student - Age 18)

1. Answer: No.
Explanation: "B and D are not far enough apart."
2. Answer: Yes.
Explanation: "They are a long distance apart ."
3. Answer: No.
Explanation: "Not far enough apart."

Student B2 (College Student - Age 17)

1. Answer: Yes.
Explanation: "Because the people can go north from Island D because in the clue it could be made in both directions."
2. Answer: No.
Explanation: "I am presuming both directions doesn't include a 45 degree angle from B to C."
3. Answer: Yes.
Explanation: "Because Island C is right below Island A."

Student B3 (College Student, age 30)

1. Answer: Yes.
Explanation: "You can't go from B to A but you can go from D to B, or go from D to C then to Island B."
2. Answer: Yes.
Explanation: "It doesn't say that you can't go. It says you can't go from A to B islands, you can cut across or go through D."
3. Answer: Yes.
Explanation: "You can as long as you don't go on to Island B."

Student B4 (Harold O'Keefe, age 20)

1. Answer: Yes.
Explanation: "Because B is bigger than D and listing is the same sequence."
2. Answer: No.
Explanation: "The sequence is broken"
3. Answer: Yes.
Explanation: "They are listing the same as in Question One."

QUESTIONS:

1. What type of thinking did you do while completing the Islands Puzzle? For example, did you need to recall any information beyond that given in the puzzle itself? Did you use combinations of information? Did you separate one piece of information from another? Did you exclude any information because it was irrelevant? Record your observations here.

2. The previous pages of this pamphlet present written student responses to the Island Puzzle. Read the responses, compare them with your response, and then record your observations and conclusions about the types of thinking you used as compared with Students A and Students B.

Now proceed to another puzzle or the self-check on page Module 1, Page 2.