NOTE: THIS EXERCISE IN NO WAY CONDONES UNDERAGE PROSTITUTION, IN THE UNITED STATES OR ANY FOREIGN COUNTRY!

Six Romanian teenagers sell their bodies to foreign pedophiles on the streets of Bucharest. Constantin, Gheorghe and Lucian are boys, while Elena, Maria and Nadia are girls. On one particular night, eight men, an American, a Briton, a Dutchman, a Frenchman, a German, an Italian, a Japanese and a Swiss engage their services. Each man has sex with exactly one teenager and all teenagers are hired by at least one man.

The following conditions apply:

Gheorghe does not have sex with either the American or the Briton. The Frenchman and the Italian have sex with a girl. If Lucian has sex with the Swiss, then Gheorghe has sex with the German. The American, the Briton and the Dutchman only like boys. Nadia has sex with the Italian. Two of the boys are hired twice. The remaining boy and all the girls are hired only once.

- 1. Which of the following is a possible arrangement of the teenagers and their clients?
- A) Constantin with the Briton and the German; Gheorghe with the Japanese; Elena with the Swiss; Lucian with American and the Dutchman; Maria with the Italian; Nadia with the Frenchman.
- B) Constantin with the American and the Dutchman; Gheorghe with the Swiss; Elena with the Frenchman; Lucian with the German and the Japanese; Maria with the Briton; Nadia with the Italian.
- C) Constantin with the Dutchman and the Swiss; Gheorghe with the American and the Japanese; Elena with the German; Lucian with the Briton; Maria with the Frenchman; Nadia with the Italian.
- D) Constantin with the American and the Briton; Gheorghe with the Dutchman; Elena with the Japanese; Lucian with the Frenchman and the German; Maria with the Swiss; Nadia with the Italian.
- E) Constantin with the American and the Dutchman; Gheorghe with the German; Elena with the Frenchman; Lucian with the Briton and the Swiss; Maria with the Frenchman; Nadia with the Italian.
- 2. Which one of the following CANNOT be true?
- A) Constantin has sex with both the American and the Briton.
- B) Lucian is hired by only one man.
- C) Gheorghe has sex with the Dutchman and the Swiss.
- D) Lucian has sex with the Swiss and Gheorghe has sex with the Japanese.
- E) The German hires Elena and the Swiss hires Constantin.

3. If the Swiss hires Elena, which one of the following could be true?

- A) One of the girls is hired by the Japanese.
- B) The German has sex with Maria.
- C) Lucian is hired by the German.
- D) Maria has sex with the Italian.
- E) The Dutchman has sex with Elena.

4. If Lucian has sex with both the German and the Japanese, then which of the following must be false?

- A) The Dutchman does not hire Gheorghe.
- B) Gheorghe has sex with only one man.
- C) Maria has sex with the Swiss.
- D) Elena is hired by the Frenchman.
- E) The Dutchman does not hire Constantin.
- 5. Which one of the following must be true?
- A) If the Swiss does not hire Lucian, the German does not hire Gheorghe.
- B) If the Japanese has sex with a boy, then the American must have sex with Constantin.
- C) If Lucian has sex with the Swiss, then the Japanese must hire either Elena or Maria.
- D) If the Frenchman hires Maria, then Elena has sex with the Swiss.
- E) If Gheorghe has sex with the German, then Lucian has sex with the Swiss.

6. If the Dutchman has sex with Lucian and the Swiss has sex with Constantin, then which one of the following is not necessarily false?

- A) Lucian has sex with the German.
- B) The American does not hire Constantin and the Japanese does not hire Maria.
- C) Constantin does not have sex with either the American or the Briton.
- D) The Japanese has sex with Constantin.
- E) Elena is hired by the German and the Japanese does not have sex with Gheorghe.

Answers and explanations:

1. E

A violates the fifth rule; B violates the fourth rule; C violates the third rule; D violates the second rule; E conforms to all the rules and is correct.

2. D

This is an interplay between the third, fourth and sixth rules. The third rule states that if the Swiss has sex with Lucian, then the German must have sex with Gheorghe, and according to the fourth rule, the American, the Briton and the Dutchman are strictly homosexual and must always have sex with boys. In addition, the sixth rule states that exactly two boys are hired twice, thus making a total of five men who have sex with boys and leaving no room for the Japanese to do so. Therefore, D cannot be true and is the right answer.

3. C

Only three of the eight men have sex with girls. Since, per the second rule, the Frenchman and the Italian are always among that number, this leaves only one more opportunity for a pedophile to have sex with a girl. The question explicitly states that the Swiss has sex with a girl, therefore A, B and E are wrong. D is wrong because it contradicts the fifth rule, leaving C as the correct answer.

4. A

One should infer from the sixth rule that exactly five men have sex with boys. If two of those are the German and the Japanese, then the remaining three must be the obligatory homosexuals, the American, the Briton and the Dutchman. However, because we know from the first rule that Gheorghe does not have sex with either the American or the Briton, they must both have sex with Constantin, since Lucian is already booked solid. This fills both of Constantin's two possible slots, thus leaving Gheorghe as the only option for the Dutchman. Therefore, A cannot be true and is correct. As far as the other answer choices, C and D both can true, while B and E must be true.

5. C

If you remember question 2, then you should be able to easily spot the right answer. According to the third rule if Lucian has sex with the Swiss, then Gheorghe must have sex with the German. Together with the American, the Briton and Dutchman, they fill the five homosexual slots, thus forcing the Japanese pedophile to hire a girl in order to fulfill his needs. But because we know from the fifth rule that the Italian has sex with Nadia, the Japanese must choose either Elena or Maria. Therefore, C is correct. A is just a "denying the premise fallacy." E, similarly, is an example of an "affirming the conclusion fallacy." B and D simply have no logical basis whatsoever.

6. B

Again, the first, fourth and sixth rules come into play here. If Lucian has sex with the Dutchman and Constantin has sex with the Swiss, it must be inferred that the two boys will each have two partners, the second partner for both boys being either the American or the Briton, thus making both boys unavailable for other pedophiles. This eliminates A, C and D. The second and sixth rules apply to E, where if the German hires Elena, only one possible opening will be left for the Japanese, with Gheorghe. E, therefore, is wrong. This leaves only B, and it is the correct answer since it could be true.