

LOGIC

QUIZ #10

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Suppose I put a penny and a gold ducat down on the table and ask you to make a statement – if your statement is true, I must give you one of the coins (not saying which); if it is false, I give you neither.

Q1. [10] What statement can you make so that I must give you the ducat?

Soln1. *If your statement is “You will not give me the penny,” that will work. If it is false, then since you will not give me the penny, it has to be true. If it is true, then you will not give me the penny, but you must give me a coin: that is the ducat.*

Q2. [10] What statement can you make so that I will not be able to keep my word?

Soln2. *If your statement is “You will give me neither coin,” that will work. If it is false, then since you will not give any coin, it has to be true. If it is true, then you will give me a coin, making the statement false.*