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‘If Oscar eats Chinese food, then he drinks milk.‘

a. If Oscar drinks milk, then he eats Chinese food.

b. If Oscar doesn’t drink milk, then he doesn’t eat Chinese food.

c. The contrapositive is always true or false in line with the original statement. If the contrapositive is false, the original statement is also false.

d. We cannot conclude anything about Oscar eating the Chienese food. If Oscar will drink milk, we still don’t know if he will eat Chinese food.

e. We can conlude that since Oscar has not drinken any milk, that he has also not eaten any Chinese food.

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‘Which of the following statements are equivalent to the implication, ‘if you win the lottery, then you will be rich,‘ and which are equivalent to the converse of the implication¿

a. Neither

b. Neither

c. Neither

d. Original

e. Converse

f. Converse

g. Original

h. Original

i. Original

j. Converse

k. Original

l. Converse

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‘Consider the statement, ‘For all natural numbers n, if n is prime, then n is solitary.‘ You do not need to know what *solitary* means for this problem, just that it is a property that some numbers have and others do not.‘

a. For all natural numbers n, if n is solitary, then n is prime.

For all natural numbers n, if n is not solitary, then n is not prime.

b. For all natural numbers n, if n is prime, then n is not solitary

c. The if statement is false, the entire statement is considered true.

d. 8 being solitary does not impact the true or false of the if statement. 8 could be prime or not prime.

e. If the original statement is true, then every prime number is solitary. However not all solitary numbers are prime.