Topic: Arranging conditionals in a logical chain

Question: What is the logical conclusion of the logic chain?

If the cat's away, then the mice will play chess.

If the mice play chess, then they will get smart.

If the mice get smart, then the cat will be humiliated.

Answer choices:

A If the mice play chess, then the cat's away.

B If the cat is humiliated, then it is away.

C If the mice are smart, then they will play chess.

D If the cat's away, then it will be humiliated.

Solution: D

To find the logical conclusion, we use the hypothesis of the first statement in the chain as its hypothesis, and we use the conclusion of the last statement in the chain as its conclusion.

> If **the cat's away**, then the mice will play chess.
>
> If the mice play chess, then they will get smart.
>
> If the mice get smart, then **the cat will be humiliated**.

Therefore, the logical conclusion is

> If **the cat's away**, then **it will be humiliated**.

Topic: Arranging conditionals in a logical chain

Question: Which statement would work for the missing conditional in the logic chain?

1) If the stars are out, then the sun has gone down.

2)

3) If it's time to party, then there will be refreshments.

Answer choices:

A If the sun has gone down, then it's time to party.

B If it's time to party, then the stars are out.

C If there will be refreshments, then the stars are out.

D If the sun has gone down, then the stars are out.

Solution: A

The conclusion of the first conditional gives us the hypothesis of the second conditional.

1) If the stars are out, then **the sun has gone down**.

2) If **the sun has gone down**, ..

The hypothesis of the third conditional gives us the conclusion of the second conditional.

2) ..... then **it's time to party**

3) If *it's time to party*, then there will be refreshments

Putting the two halves of 2) together, we see that the missing conditional is

If **the sun has gone down**, then **it's time to party**.

Topic: Arranging conditionals in a logical chain

Question: The four statements below can be rearranged to form a logic chain. What is the logical conclusion of the logic chain?

If your dog wrecks the lawn, then you will have to buy sod.

If you have a dog, then you will give him a bone.

If your dog digs a hole, then he will wreck the lawn.

If you give your dog a bone, then he will dig a hole.

Answer choices:

A If your dog digs a hole, then he will make you mad.

B If your lawn is wrecked, then you gave your dog a bone.

C If you have a dog, then you will have to buy sod.

D If your dog has a bone, then you gave it to him.

Solution: C

Arrange the conditionals in the following order, so that the hypothesis of each conditional is the same as the conclusion of the previous conditional.

If you have a dog, then you will give him a **bone**.

If you give your dog a **bone**, then he will dig a **hole**.

If your dog digs a **hole**, then he will **wreck the lawn**.

If your dog **wrecks the lawn**, then you will have to **buy sod**.

The logical conclusion of this logic chain is

If you have a dog, then you will have to buy sod.