The answer is (c): we will have a Moebius strip with an extra twist, as seen in an mpeg video by clicking your mouse on the photograph above. It is even complicated when you see it! Perhaps you must make your own to understand it thoroughly.

By the way:

Q: Why did the chicken cross the Moebius strip?
A: To get to the ... um, er ...

Click your mouse to see a copy of Escher "Mobius Strip II, 1963 Poster." On which side are the ants walking?