

# [Mobius strip essay sample](https://assignbuster.com/mobius-strip-essay-sample/)

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1. The object obtained after cutting the Mobius strip has one side and it is again a Mobius strip having half width of the original Mobius strip. We take a paper strip as shown in the given figure and connect A to Z and B to Y. We draw a line in the centre of the strip without lifting the pen till it reaches the point from where we started. Then we cut the strip along the line. We again get a Mobius strip of half width as mentioned above. This is very easy and one can do it without any difficulty.

We make another Mobius strip and, this time, we draw the line one-third of the way in from one edge, so that the line is off-center, making the width of one side of the line twice as wide as the other. This remains Mobius strip and, hence, has one side.

Now we cut the strip along the line we have drawn. We get two Mobius strips which are interlinked together. The width of one strip is half of the other and length of smaller strip width strip is double of the length of the larger width strip.

In continuation of the above, the next possibility is cut the higher width strip in middle. We get three Mobius strips of the same width interlinked together. The width as well as length of each strip is same.

1. A geometric shape, which is rough or fragmented and capable of being split into parts, is called fractal. Each part is a reduced-size copy of the whole at least approximately. A fractal has a fine structure when observed at arbitrarily small scales. It is so irregular that it cannot be so easily described in traditional Euclidean geometric language.

Non-Euclidean geometry is different Euclidean geometry in the aspect that space is defined by three mutually perpendicular axes in Euclidean geometry where as we require more than 3 dimensions in non-Euclidean geometry to define space. In Euclidean geometry, the distance between parallel lines remains same irrespective of their lengths but in non-Euclidean geometry, the distance between parallel lines goes on increasing with their length. In Euclidean geometry, the sum of angles of a triangle is 180 0 but in case of non-Euclidean geometry, the sum of angles of triangle is not equal to 180 0 . Spherical geometry is example of non-Euclidean geometry.