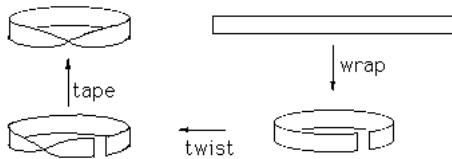


Marathon Math Problems - Week 15

Name: _____

1. Cut out the strip on the dotted line. You are going to make a *Möbius strip*. *Lightly* shade one side with any light color, and leave the back white. To make the Möbius strip, we are going to give the strip a half-twist (shown in the picture below), and then connect the short ends of the strip using tape.



2. Take a dark marker that will show up on either side of your Möbius strip. Starting on the shaded side with your marker in the middle of the strip, trace a line down the center (lengthwise) until it connects back to itself. Write a few sentences about what happens when you do this. Does something surprising happen?

3. Using a scissors we are going to cut along the center line that we drew. *Before* you do this, write down a prediction for what will happen. Show your teacher your prediction and your uncut Möbius strip, and have her initial next to it. Then cut the Möbius strip and write down a few sentences about what actually happened. Was it what you expected?