Difficulty: 2/4 Interest: 3/4

Consider all of the shapes that can be made with a rubber band and a rubber hand.

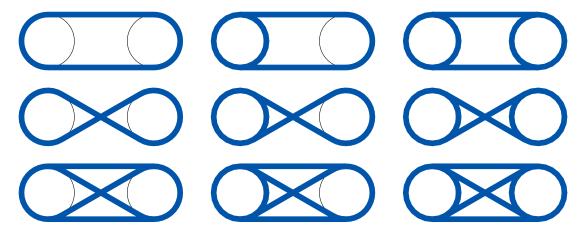


Figure 1: There are (at least) 9 ways to weave a rubber band between two fingers up to reflection/rotation.

Question. How many figures can be made with n fingers and a rubber band?

Related.

- 1. Is there an analog in higher dimensions?
- 2. What if all fingers must be aligned?
- 3. What if all fingers must be on the corners of an n-gon?