Difficulty: 2/4 Interest: 4/4

Let a "popsicle stick weave" be a configuration of lines segments, called "sticks", such that

(1) when you lift up any stick by the end, the structure supports itself (is in tension)

(2) the removal of any stick results in a configuration that no longer supports itself.

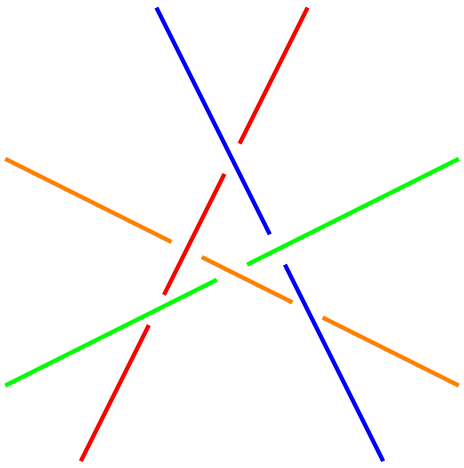

Figure 1: The unique example of a 4 stick crossing (up to reflection)

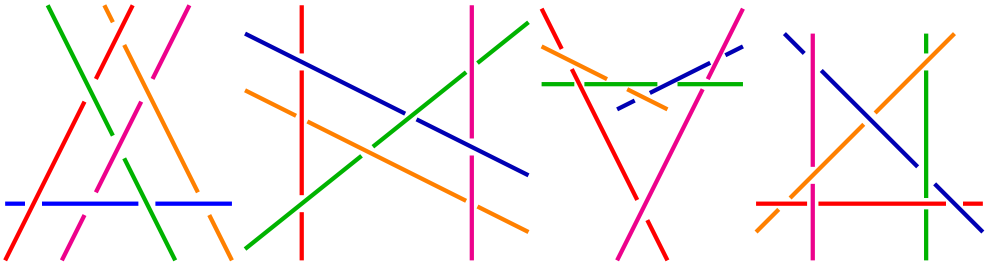

Figure 2: Four of five (?) known examples of five-stick crossings. Perhaps the fourth example shouldn't count, because shortening the blue stick to avoid the blue-red crossing results in a valid configuration (the remaining known five-stick crossing).

Question. How many distinct popsicle stick weaves exist for n sticks?

Related.

1. What if the sticks are only allowed to touch three other sticks?
2. What if the sticks are another geometric object (e.g. semicircles)?