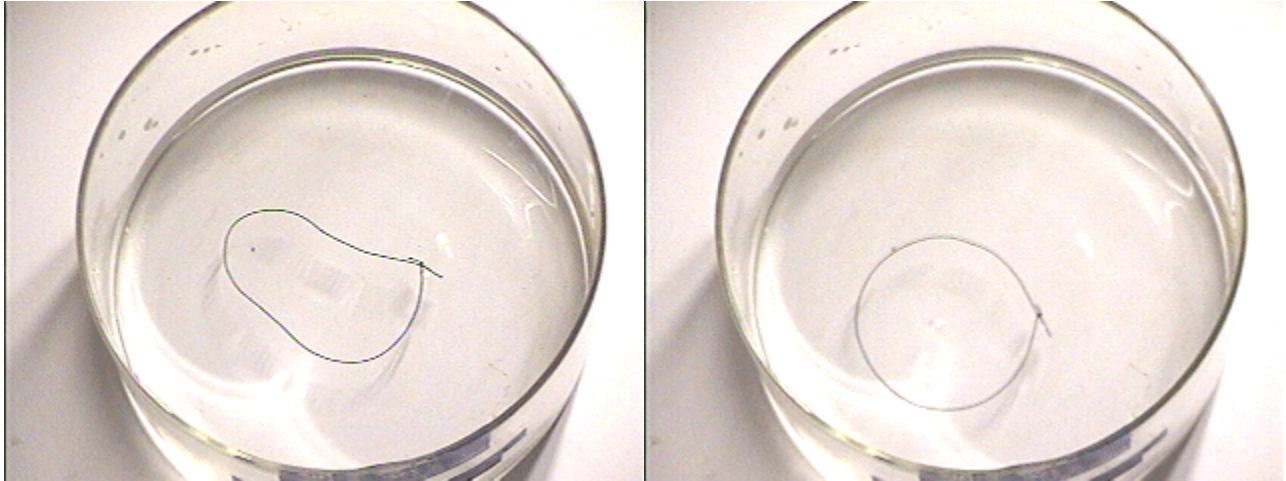


## Answer #101

The answer is (a): the thread loop will expand to its maximum possible area, as seen in the photograph at the right, and in an mpeg video by clicking your mouse on the photograph at the right.



The drop of soap solution inside the loop spreads out and reduces the surface tension of the water inside the loop, so the greater surface tension on the outside immediately pulls out the string loop, as seen in the video. The system is circularly symmetric, so the loop stretches into a circle, the figure with the maximum area for its perimeter.

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For questions and comments regarding the *Question of the Week* contact [Dr. Richard E. Berg](#) by e-mail or using phone number or regular mail address given on the [Lecture-Demonstration Home Page](#).