

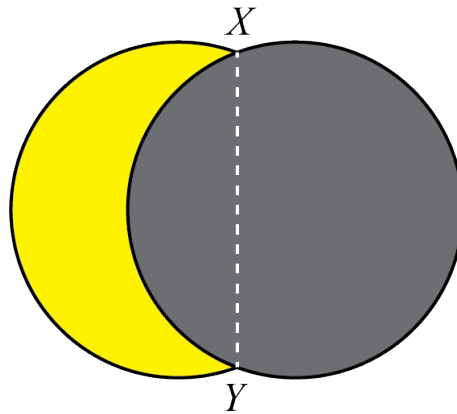


## Problem of the Week

### Problem E

### Outside the Path of Totality

Yannick used a camera with a solar filter to capture a solar eclipse. From their location, the Moon blocked some, but not all of the Sun, so they saw a partial solar eclipse. When Yannick enlarged and printed the photo, they noticed that the distance represented by segment  $XY$  in the photo shown was 70 cm, and that the diameters of the Sun and the Moon were both 74 cm.



Determine the percentage of the Sun that is blocked by the Moon in Yannick's photo, rounded to 1 decimal place.