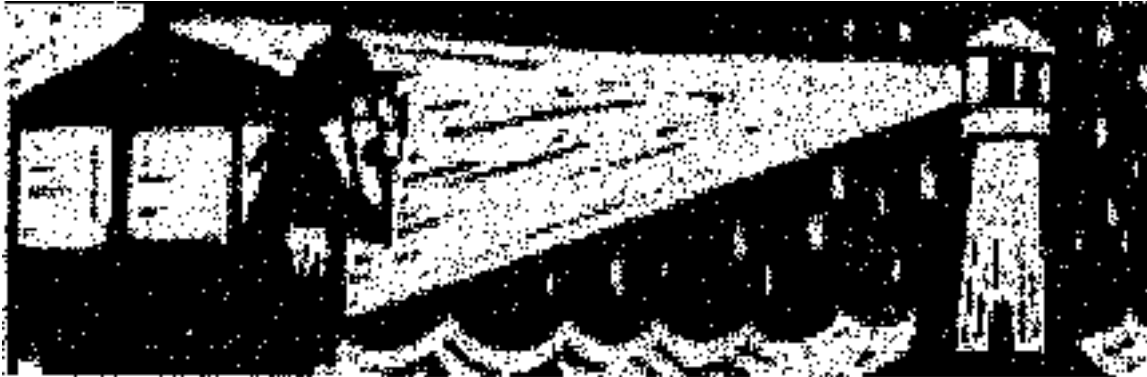


Lighthouse

A lighthouse shows successive one-second flashes of red, white, green, green, white, red. A second lighthouse does the same, only with two-second flashes. The six-second sequence of the first lighthouse is repeated steadily, as is the twelve-second sequence of the other lighthouse. What fraction of the time do the two lights show the same color if the given sequences start at the same time?



Lillian Nielsen's note that appeared with this puzzle said: "If you can't locate two lighthouses in close proximity, binoculars won't help find a solution. Settle back and think colors!" We have no idea if that note relates to the solution, but it only seemed fair to include it in case it did!