Read the problems carefully and **show your work**.

Two raindrops randomly fall on a large square region. The square is divided into 4 congruent subsquares as shown.

1. What is the probability that the first raindrop lands in the shaded subsquare?
   
   *Hint:* View a raindrop as a single point in the square region. What is the sample space? What is the event? How are events to be measured?

2. What is the probability that both raindrops land in the same subsquare?

3. What is the probability that the two drops land in different subsquares?