1. A box 3 red balls and 5 black balls Suppose that 3 balls are picked without replacement. Find the probability:

   (a) P(All three balls are red)

   (b) P(The third ball is red|The first two balls are red)

   (c) P(The first two balls is red|The third two is red)

   (d) P(The first two balls are the same color)