Assignment 17.3

Two balls are drawn at random in succession without replacement from an urn

containing 4 red balls and 6 black balls.

Find the probabilities of all the possible outcomes.

Possible outcomes - BB, BR,RR

1. Two black balls :

P(BB) = 6/10 \* 5/9 = 30/90 = 1/3 = 0.333333

1. One black ball & one red ball:

P(BR) = (6/10 \* 4/9) + (4/10 \* 6/9) = 24/90 +24/90 = 48/90 = 24/45 =8/15 = .533333

1. Two red balls:

P(RR) = 4/10 \* 3/9 = 12/90 = 6/45 = 2/15 = 0.133333