Question 2

There are two urns ,a green urn and a red urn.
The green urn contains 17 green balls and the red urn contains 15 red balls.Each round, one ball is chosen randomly from either urn.
The probability that the green urn on any given round is chosen is 4/7.
The probability that the red urn is chosen is 3/7.
What is the probability that there are exactly 6 red balls remaining at the moment the green urn is discovered to be empty.