Week – 5 Questions

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Q1

1. Let x = 1.1

P(x) = probability that either both are red or both are blue

= 4/9

Now y = -1.0

P(y) = ((5C1) \* (5C1)) / (10C2)

= 5/9

E(y) = (1.1 \* 4/9) – (1.0 \* 5/9)

= -0.0667

1. E [y^2] = ((1.1)^2 \* 4/9) – ((1)^2 \* 5/9)

= 1.0933

Var(x) = E [y^2] – [E(x)]^2

= 1.0933 – (-0.0667)^2

= 1.089