Reading Assignment 1

Q1.

E = -(9/14log(9/14) + 5/14log(5/14)

= -(-0.414 – 0.530)

= 0.944

E1 = - (3/7log(3/7) + 4/7log(4/7))

= - (0.522 – 0.463)

= 0.985

E3 = - (6/7log(6/7) + 1/7log(1/7))

= - (-0.187 + 0.405)

= 0.592

Q2.

Expected Residual Value = 7/14\*H(3/7, 4,7) + 7/14\*H(6/7, 1/7)

= 0.493 + 0.296

= 0.789

Information Gain = E – Expected Residual Value

= 0.944 – 0.789

= 0.155

*Submitted by:*

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