

[Document title]

[Document subtitle]



[Date]

[Company name]

[Company address]

Chart

Description automatically generatedQ3)

Chart

Description automatically generated

Chart, bar chart

Description automatically generated

Q4)

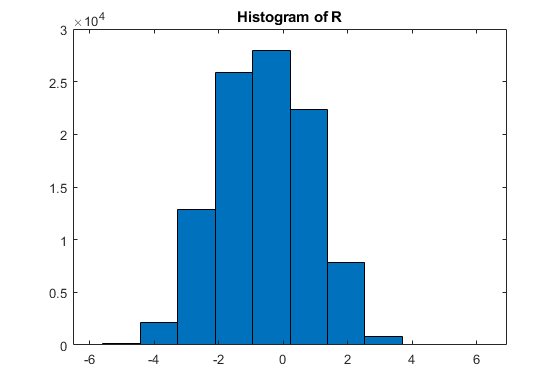
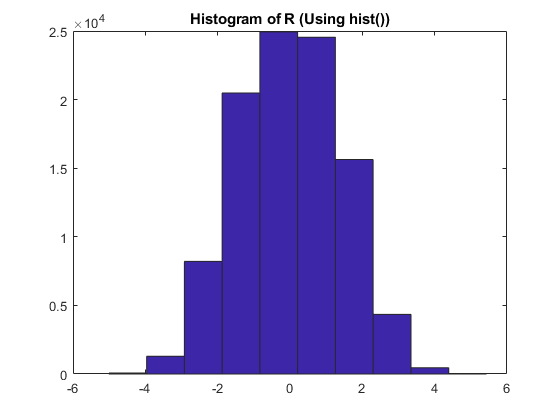
Chart, bar chart, surface chart

Description automatically generated

Chart

Description automatically generated

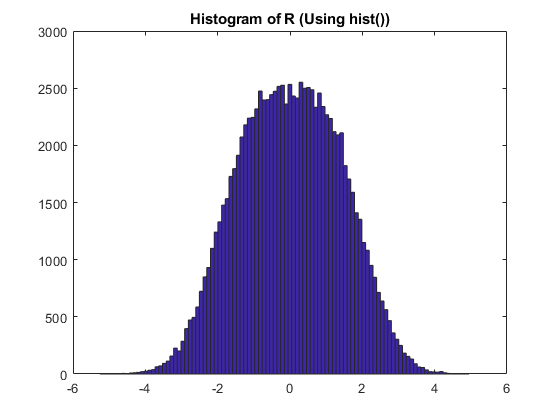
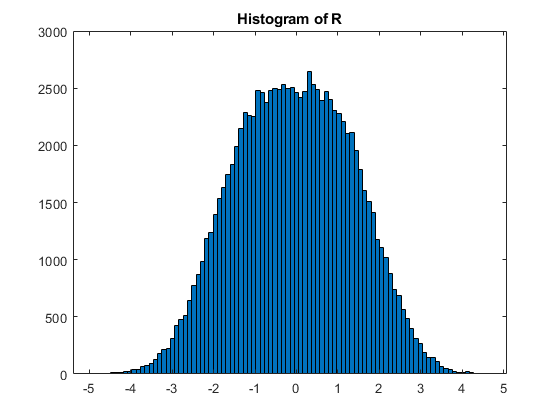
Q5)



Nearly similar histograms can be observed, due to changes in limits of choosing bin (upper and lower) limits slight difference is present.

The histograms have a distant look of Gaussian distribution.

a)



The histograms have a close look of Gaussian distribution.

b)

Chart, histogram

Description automatically generated

Chart, histogram

Description automatically generated

Chart, histogram

Description automatically generatedChart, histogram

Description automatically generated

Chart, histogram

Description automatically generatedChart, histogram

Description automatically generated

When A increases the pdfs deviates from its initial positions when A=1.

This is due to mean values of the pdfs is -A for and A for

c)

|  |  |  |  |
| --- | --- | --- | --- |
| A | E [R|S = A] | E [R|S = -A] | E [R] |
| 1 | 1.0025 | -1.0017 | 0.003864 |
| 2 | 1.9976 | -2.0006 | -0.0012 |
| 3 | 3.0006 | -3.0068 | -0.0029 |

d)

Chart, histogram

Description automatically generated

Chart, histogram

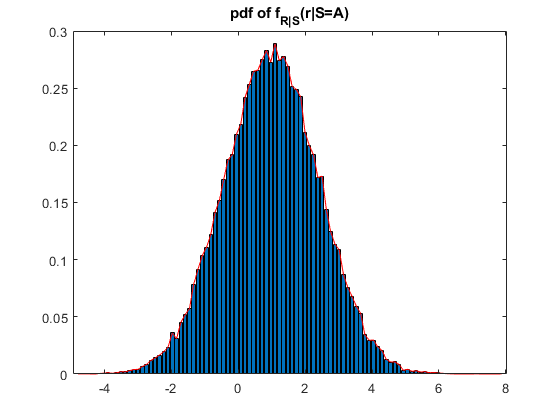
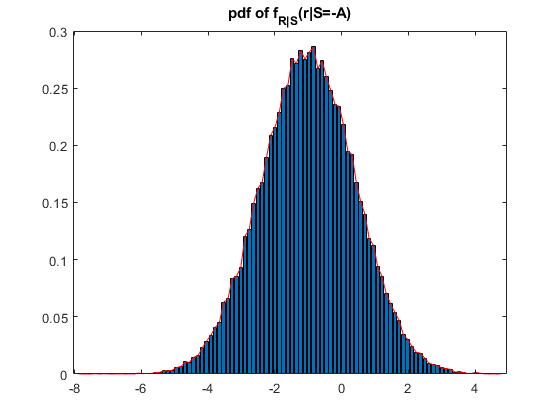
Description automatically generated

Chart, histogram

Description automatically generated

Q6)

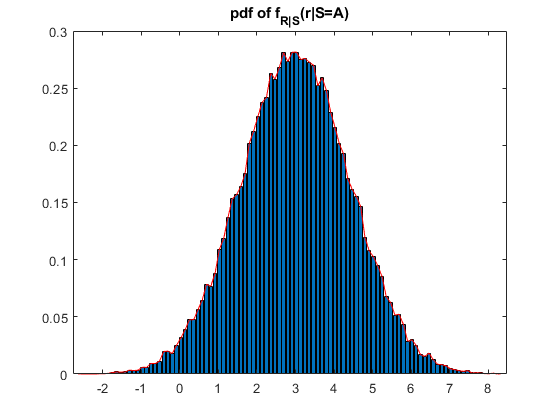
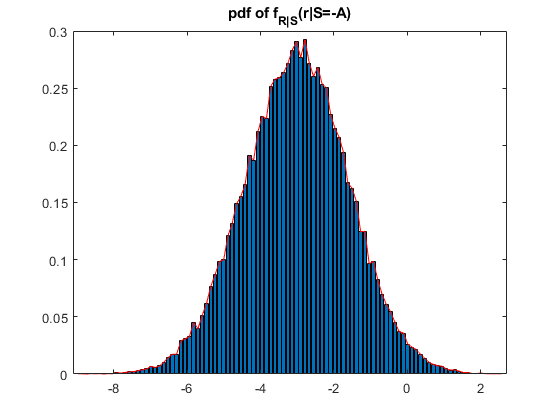
b)



Chart, histogram

Description automatically generatedChart, histogram

Description automatically generated



c)

|  |  |  |  |
| --- | --- | --- | --- |
| A | E [R|S = A] | E [R|S = -A] | E [R] |
| 1 | 0.9965 | -0.9965 | -0.000091 |
| 2 | 2.0001 | -2.0088 | -0.0044 |
| 3 | 2.999 | -3.0159 | -0.0081 |

d)

Chart, histogram

Description automatically generated

Chart, histogram

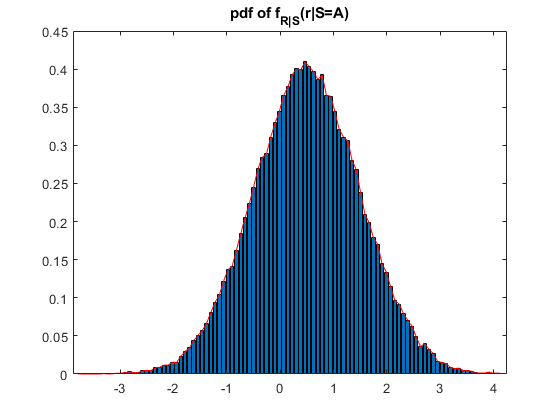
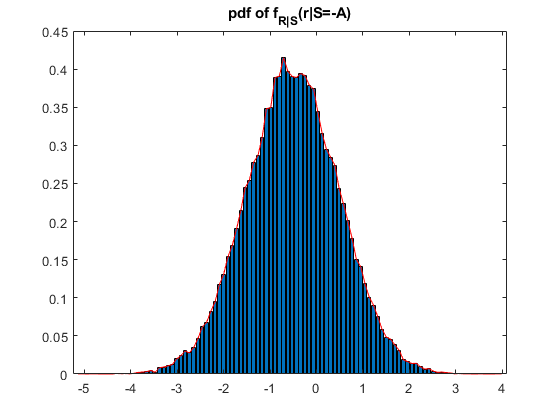
Description automatically generated

Chart, histogram

Description automatically generated

Q7)

b)



Chart, histogram

Description automatically generatedChart, histogram

Description automatically generated

Chart, histogram

Description automatically generatedChart, histogram

Description automatically generated

c)

|  |  |  |  |
| --- | --- | --- | --- |
| α | E [R|S = A] | E [R|S = -A] | E [R] |
| 0.5 | 0.5011 | -0.5090 | -0.0038 |
| 2 | 1.9994 | -2.0056 | -0.0031 |
| 3 | 2.9899 | -2.9972 | -0.0035 |

d)