Zach Swain

1a)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| rlamb(i) , n=20 | x , n=20 |  | rlamb(i) , n=40 | x , n=40 |
| 0.650847 | -0.975528 |  | 0.320908 | -0.993844 |
| 0.587137 | -0.880037 |  | 0.313006 | -0.969372 |
| 0.465955 | -0.698401 |  | 0.297397 | -0.921032 |
| 0.299161 | -0.448401 |  | 0.274465 | -0.850012 |
| 0.103084 | -0.154508 |  | 0.244775 | -0.758062 |
| -0.103084 | 0.154508 |  | 0.209058 | -0.647446 |
| -0.299161 | 0.448401 |  | 0.168193 | -0.520888 |
| -0.465955 | 0.698401 |  | 0.123186 | -0.381504 |
| -0.587137 | 0.880037 |  | 0.075146 | -0.232726 |
| -0.650847 | 0.975528 |  | 0.025256 | -0.078217 |
|  |  |  | -0.025256 | 0.078217 |
|  |  |  | -0.075146 | 0.232726 |
|  |  |  | -0.123186 | 0.381504 |
|  |  |  | -0.168193 | 0.520888 |
|  |  |  | -0.209058 | 0.647446 |
|  |  |  | -0.244775 | 0.758062 |
|  |  |  | -0.274465 | 0.850012 |
|  |  |  | -0.297397 | 0.921032 |
|  |  |  | -0.313006 | 0.969372 |
|  |  |  | -0.320908 | 0.993844 |

1b)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| cpe(i) , N=20 | cp(i) , N=20 | theta , N=20 |  | cpe(i) , N=40 | cp(i) , N=40 | theta , N=40 |
| 0.902113 | 0.906406 | 2.984513 |  | 0.975377 | 0.975954 | 3.063053 |
| 0.17557 | 0.211724 | 2.670354 |  | 0.782013 | 0.787123 | 2.905973 |
| -1 | -0.912295 | 2.356194 |  | 0.414214 | 0.427946 | 2.748894 |
| -2.175571 | -2.036313 | 2.042035 |  | -0.092019 | -0.06642 | 2.591814 |
| -2.902113 | -2.730995 | 1.727876 |  | -0.687131 | -0.647581 | 2.434734 |
| -2.902113 | -2.730995 | 1.413717 |  | -1.312869 | -1.258651 | 2.277655 |
| -2.175571 | -2.036313 | 1.099557 |  | -1.907981 | -1.839812 | 2.120575 |
| -1 | -0.912295 | 0.785398 |  | -2.414214 | -2.334178 | 1.963495 |
| 0.175571 | 0.211724 | 0.471239 |  | -2.782013 | -2.693355 | 1.806416 |
| 0.902113 | 0.906406 | 0.15708 |  | -2.975377 | -2.882186 | 1.649336 |
| 0.902113 | 0.906406 | -0.15708 |  | -2.975377 | -2.882186 | 1.492257 |
| 0.175571 | 0.211724 | -0.471239 |  | -2.782013 | -2.693355 | 1.335177 |
| -1 | -0.912295 | -0.785398 |  | -2.414214 | -2.334178 | 1.178097 |
| -2.175571 | -2.036313 | -1.099557 |  | -1.907981 | -1.839812 | 1.021018 |
| -2.902113 | -2.730995 | -1.413717 |  | -1.312869 | -1.258651 | 0.863938 |
| -2.902113 | -2.730995 | -1.727876 |  | -0.687131 | -0.647581 | 0.706858 |
| -2.175571 | -2.036313 | -2.042035 |  | -0.092019 | -0.06642 | 0.549779 |
| -1 | -0.912295 | -2.356194 |  | 0.414214 | 0.427946 | 0.392699 |
| 0.17557 | 0.211724 | -2.670354 |  | 0.782013 | 0.787123 | 0.235619 |
| 0.902113 | 0.906406 | -2.984513 |  | 0.975377 | 0.975954 | 0.07854 |
|  |  |  |  | 0.975377 | 0.975954 | -0.07854 |
|  |  |  |  | 0.782013 | 0.787123 | -0.235619 |
|  |  |  |  | 0.414214 | 0.427946 | -0.392699 |
|  |  |  |  | -0.092019 | -0.06642 | -0.549779 |
|  |  |  |  | -0.687131 | -0.647581 | -0.706858 |
|  |  |  |  | -1.312869 | -1.258651 | -0.863938 |
|  |  |  |  | -1.907981 | -1.839812 | -1.021018 |
|  |  |  |  | -2.414214 | -2.334178 | -1.178097 |
|  |  |  |  | -2.782013 | -2.693355 | -1.335177 |
|  |  |  |  | -2.975377 | -2.882186 | -1.492257 |
|  |  |  |  | -2.975377 | -2.882186 | -1.649336 |
|  |  |  |  | -2.782013 | -2.693355 | -1.806416 |
|  |  |  |  | -2.414214 | -2.334178 | -1.963495 |
|  |  |  |  | -1.907981 | -1.839812 | -2.120575 |
|  |  |  |  | -1.312869 | -1.258651 | -2.277655 |
|  |  |  |  | -0.687131 | -0.647581 | -2.434734 |
|  |  |  |  | -0.092019 | -0.06642 | -2.591814 |
|  |  |  |  | 0.414214 | 0.427946 | -2.748894 |
|  |  |  |  | 0.782013 | 0.787123 | -2.905973 |
|  |  |  |  | 0.975377 | 0.975954 | -3.063053 |

1c)

1d)