Ph3 Set 7

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N@CDF[NormalDistribution[0, 1],
     \{1, 1.01, 1.02, 1.03, 1.04, 1.05, 1.06, 1.07, 1.08, 1.09\}\} * 2 - 1
\{0.682689, 0.687505, 0.692272, 0.69699,
 \tt 0.70166,\, 0.706282,\, 0.710855,\, 0.715381,\, 0.719858,\, 0.724287 \rbrace
N@ (CDF[NormalDistribution[0, 1],
       \{0.5, 0.51, 0.52, 0.53, 0.54, 0.55, 0.56, 0.57, 0.58, 0.59\}\} \times 2 - 1) / 2
{0.191462, 0.194974, 0.198468, 0.201944,
 0.205401, 0.20884, 0.21226, 0.215661, 0.219043, 0.222405}
PearsonCorrelationTest[{1, 2, 3, 4, 5}, {8, 8, 5, 6, 3}, "TestDataTable"]
              Statistic
Pearson Correlation | -0.894427 | 0.0405193
PearsonCorrelationTest[{1, 2, 3, 4, 5}, {8, 8, 5, 6, 3}, "TestConclusion"]
The null hypothesis that the populations are independent
 is rejected at the 5 percent level based on the Pearson Correlation test.
PearsonCorrelationTest[{1, 2, 3, 4, 5},
 {8, 8, 5, 6, 3}, "TestConclusion", SignificanceLevel → 0.01]
The null hypothesis that the populations are independent
 is not rejected at the 1. percent level based on the Pearson Correlation test.
PearsonCorrelationTest[{1, 2, 3, 4, 5}, {4, 6, 3, 0, 2}, "TestDataTable"]
              Statistic P-Value
Pearson Correlation -0.707107 0.18169
PearsonCorrelationTest[{1, 2, 3, 4, 5}, {4, 6, 3, 0, 2}, "TestConclusion"]
The null hypothesis that the populations are independent
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is not rejected at the 5 percent level based on the Pearson Correlation test.

PearsonCorrelationTest[{1, 2, 3, 4, 5},

 $\{4, 6, 3, 0, 2\}$, "TestConclusion", SignificanceLevel $\rightarrow 0.01$]

The null hypothesis that the populations are independent is not rejected at the 1. percent level based on the Pearson Correlation test.

IndependenceTest[{1, 2, 3, 4, 5}, {8, 8, 5, 6, 3}, {"TestDataTable", All}]

	Statistic	P-Value
Blomqvist β	-0.75	0.333333
Goodman-Kruskal γ	-0.777778	0.141645
Hoeffding ${\mathcal D}$	-0.375	0.964362
Kendall τ	-0.737865	0.0769742
Pearson Correlation	-0.894427	0.0405193
Pillai Trace	0.8	0.0455003
Spearman Rank	-0.872082	0.0538542
Wilks W	0.8	0.00455743