Experiments: N = 50, 75

Kristyn Pantoja

6/27/2019

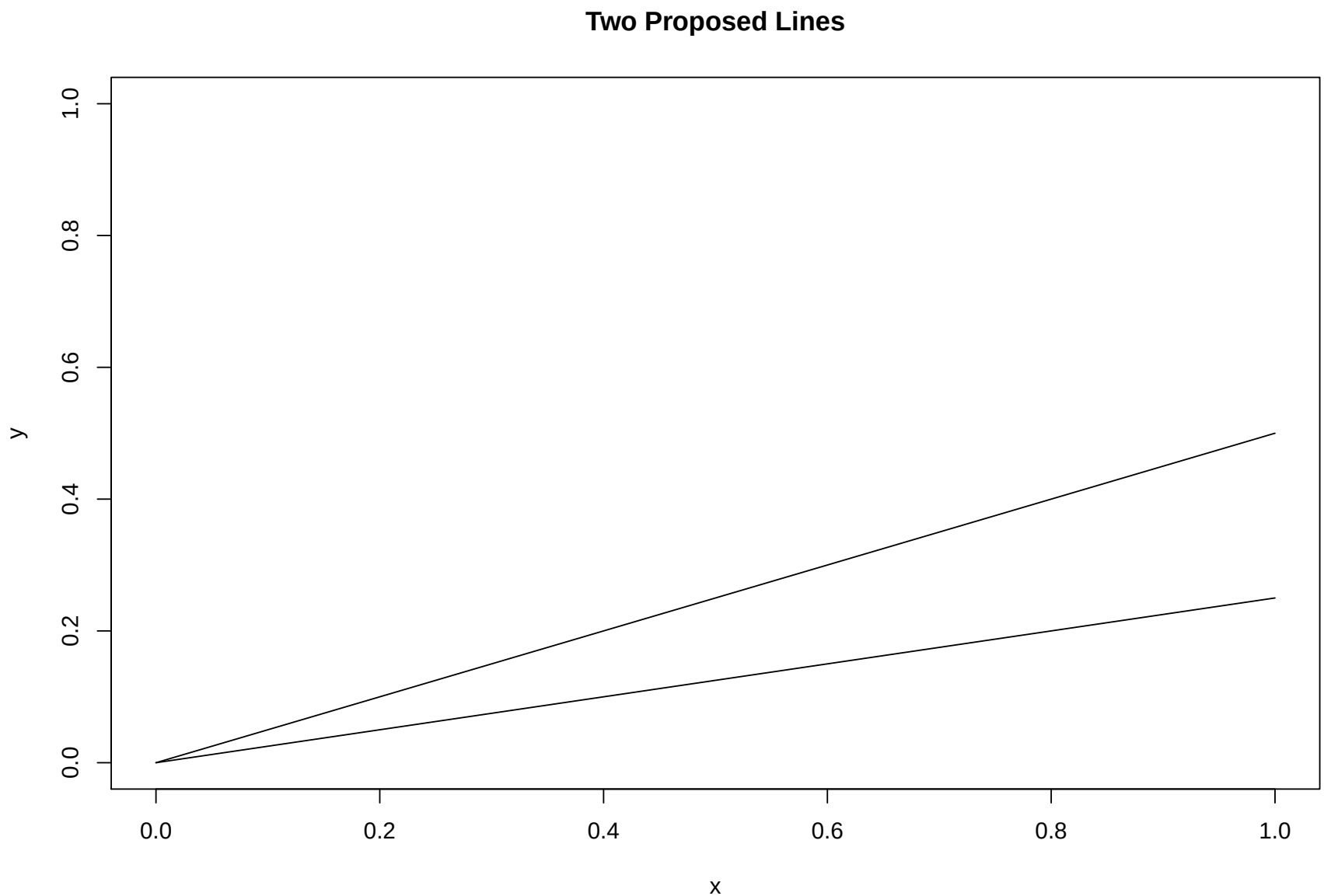
Simple Linear Regression: Unknown Slope

Simple Linear Regression: Unknown Intercept & Slope

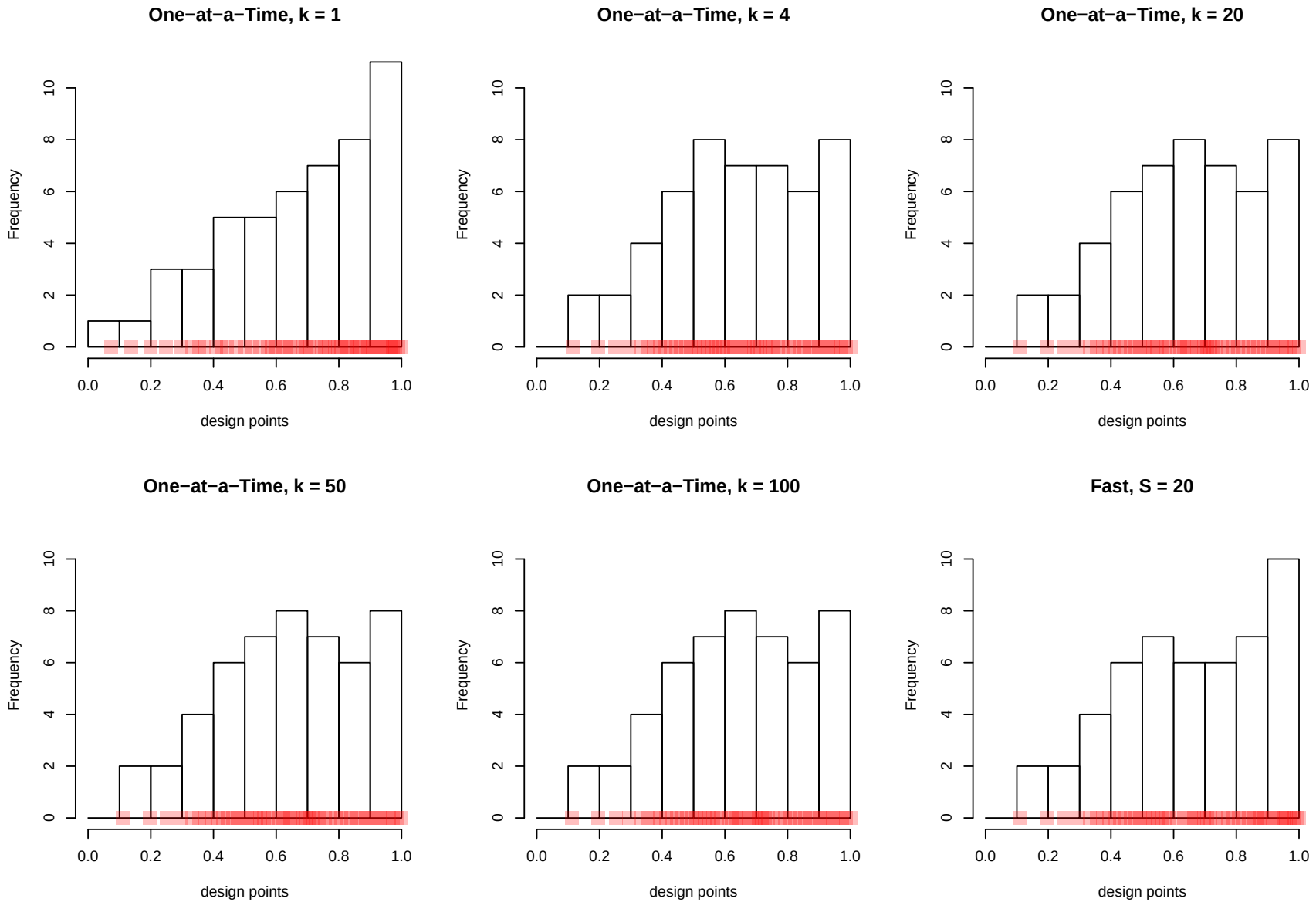
Linear vs. Quadratic

Simple Linear Regression: Unknown Slope

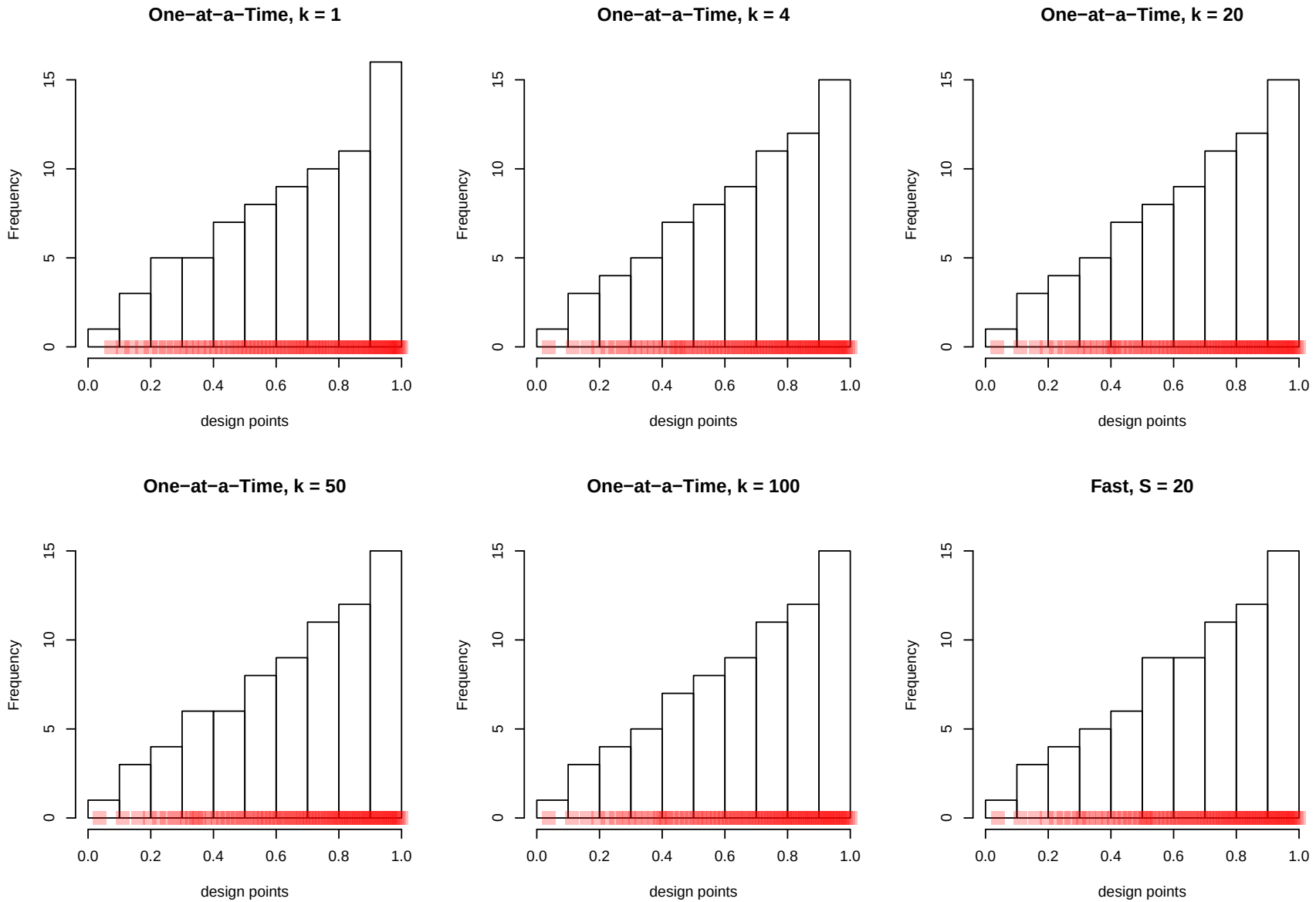
Simple Linear Regression: Unknown Slope



Designs, N = 50

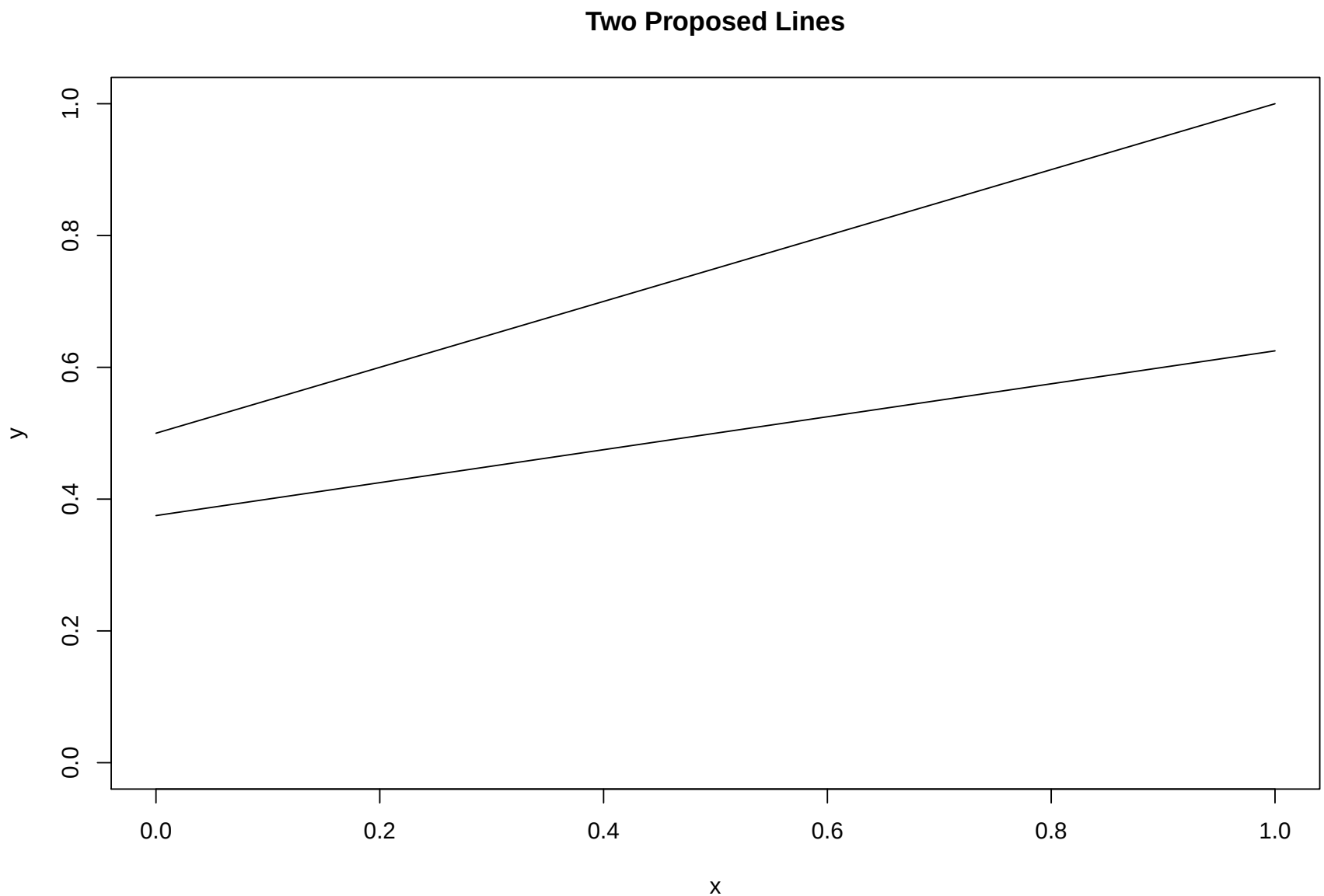

One−at−a−Time, k = 1
One−at−a−Time, k = 4
One−at−a−Time, k = 20
One−at−a−Time, k = 50
One−at−a−Time, k = 100
Fast, S = 20
Frequency
design points
0
2
4
6
8
10
0.0
0.2
0.4
0.6
0.8
1.0

Designs, N = 75

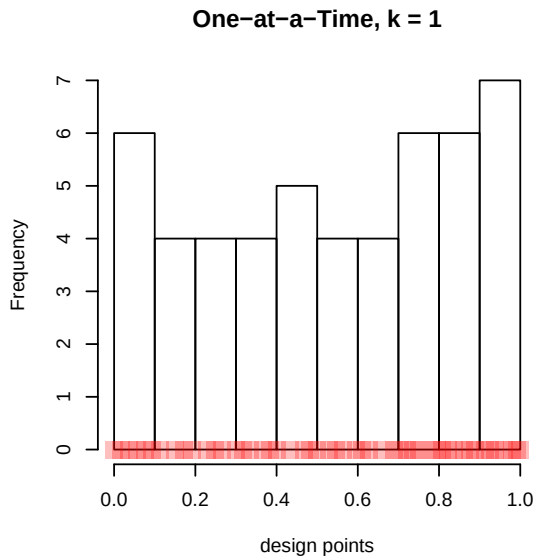

One−at−a−Time, k = 1
One−at−a−Time, k = 4
One−at−a−Time, k = 20
One−at−a−Time, k = 50
One−at−a−Time, k = 100
Fast, S = 20
Frequency
design points
0
5
10
15
0.0
0.2
0.4
0.6
0.8
1.0

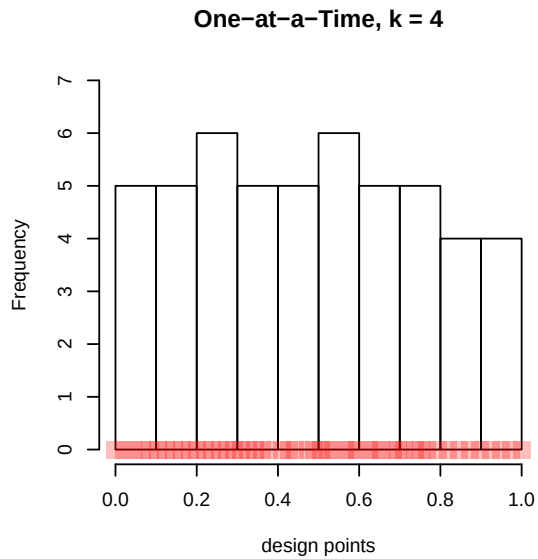
Simple Linear Regression: Unknown Intercept & Slope

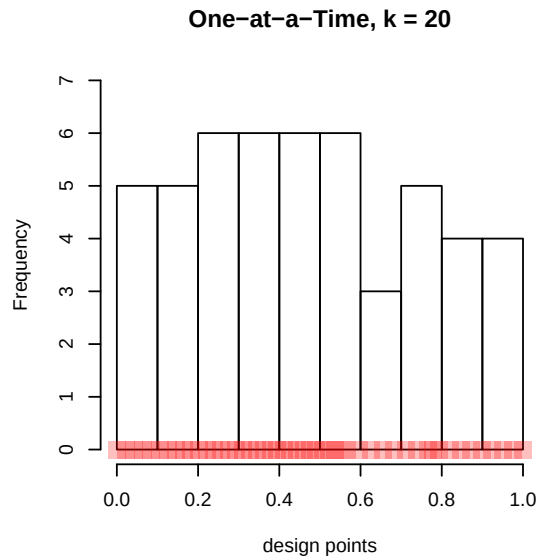
Simple Linear Regression: Unknown Intercept & Slope

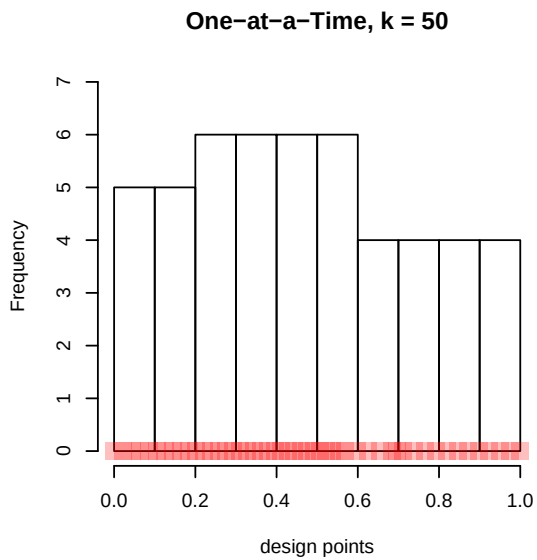


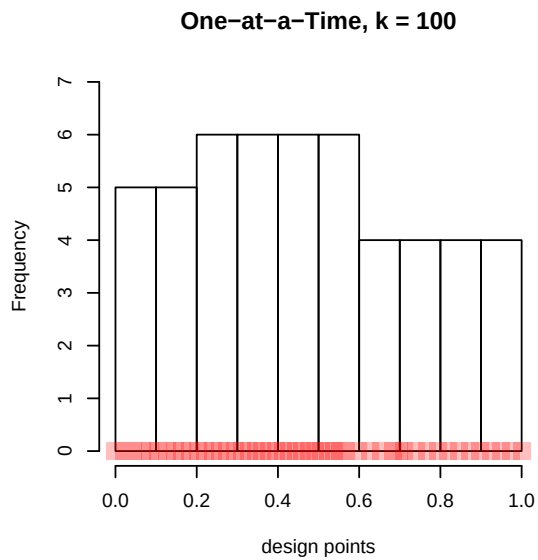
Designs, N = 50

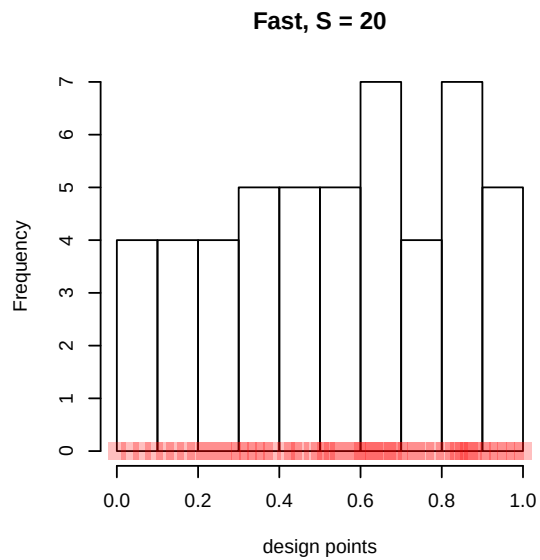

One−at−a−Time, k = 1
Frequency
0 1 2 3 4 5 6 7
0.0 0.2 0.4 0.6 0.8 1.0
design points


One−at−a−Time, k = 4
Frequency
0 1 2 3 4 5 6 7
0.0 0.2 0.4 0.6 0.8 1.0
design points

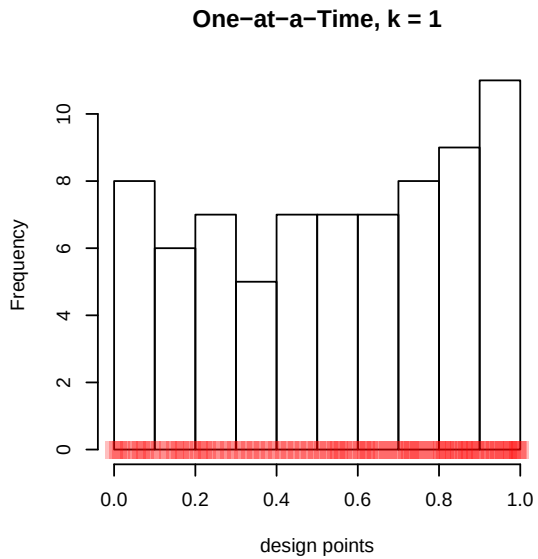

One−at−a−Time, k = 20
Frequency
0 1 2 3 4 5 6 7
0.0 0.2 0.4 0.6 0.8 1.0
design points

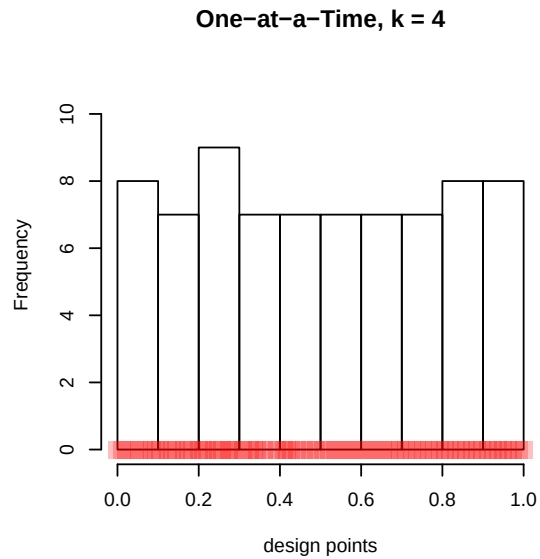

One−at−a−Time, k = 50
Frequency
0 1 2 3 4 5 6 7
0.0 0.2 0.4 0.6 0.8 1.0
design points


One−at−a−Time, k = 100
Frequency
0 1 2 3 4 5 6 7
0.0 0.2 0.4 0.6 0.8 1.0
design points


Fast, S = 20
Frequency
0 1 2 3 4 5 6 7
0.0 0.2 0.4 0.6 0.8 1.0
design points

Designs, N = 75


One−at−a−Time, k = 1
Frequency
0
2
4
6
8
10
0.0
0.2
0.4
0.6
0.8
1.0
design points


One−at−a−Time, k = 4
Frequency
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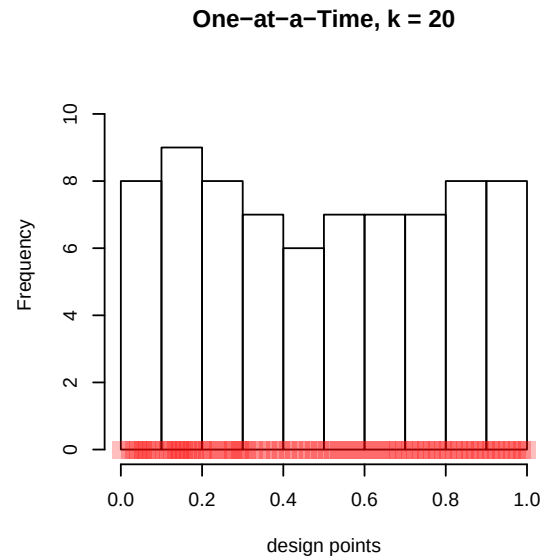
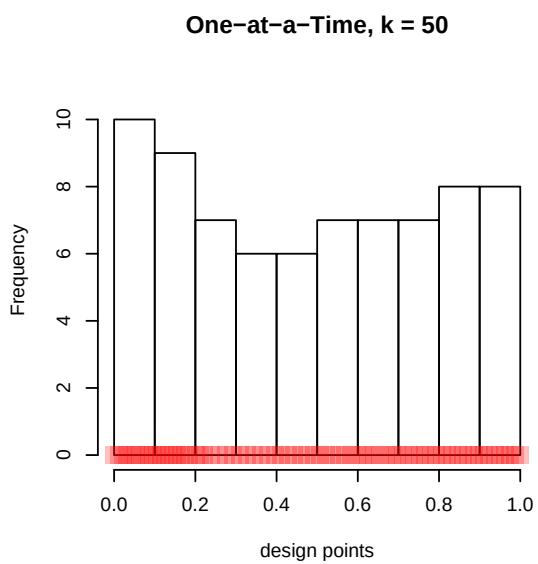
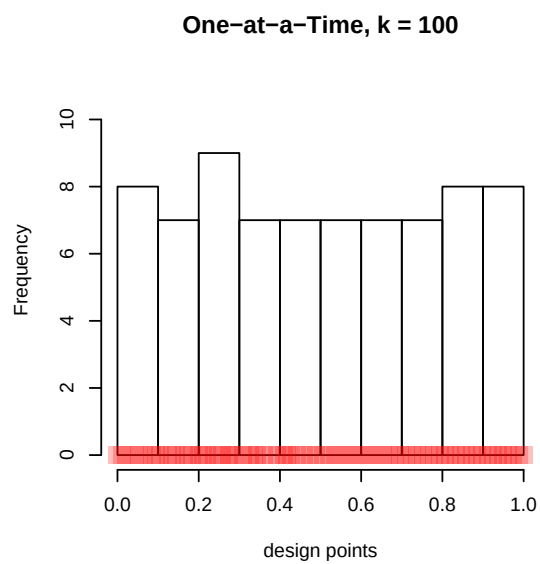
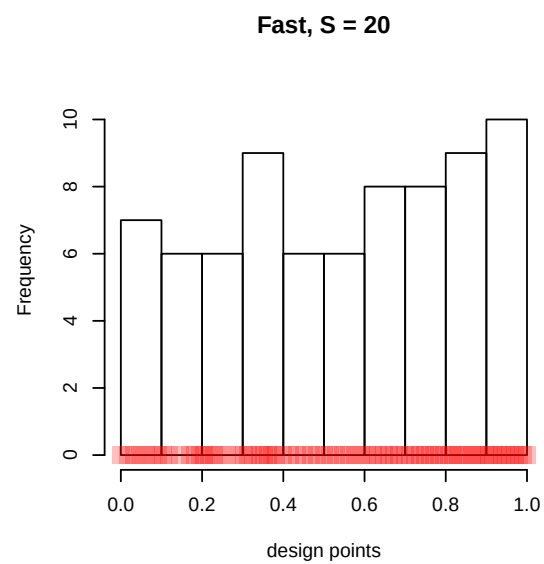
4
6
8
10
0.0
0.2
0.4
0.6
0.8
1.0
design points


One−at−a−Time, k = 20
Frequency
0
2
4
6
8
10
0.0
0.2
0.4
0.6
0.8
1.0
design points

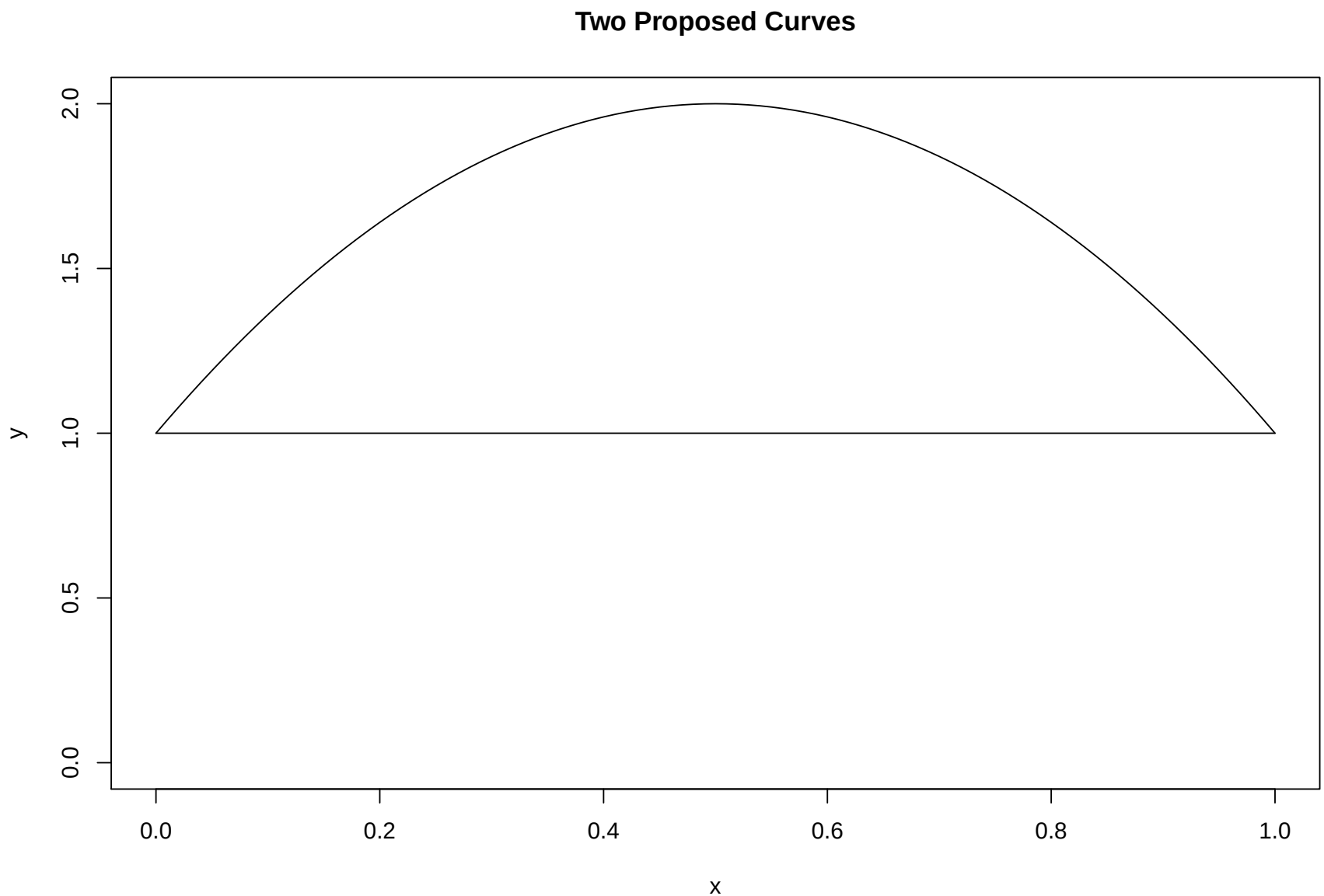

One−at−a−Time, k = 50
Frequency
0
2
4
6
8
10
0.0
0.2
0.4
0.6
0.8
1.0
design points


One−at−a−Time, k = 100
Frequency
0
2
4
6
8
10
0.0
0.2
0.4
0.6
0.8
1.0
design points

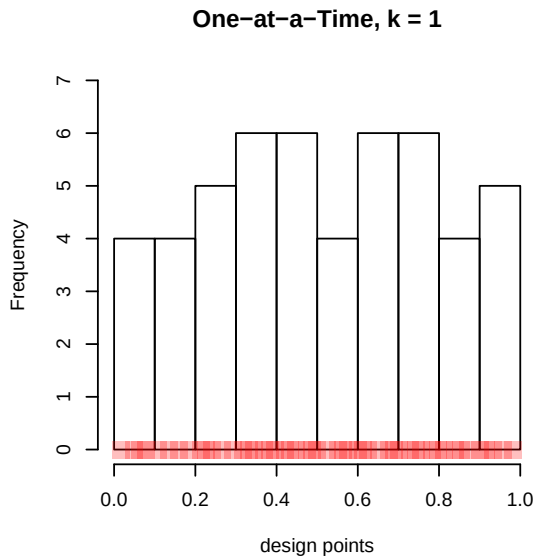

Fast, S = 20
Frequency
0
2
4
6
8
10
0.0
0.2
0.4
0.6
0.8
1.0
design points

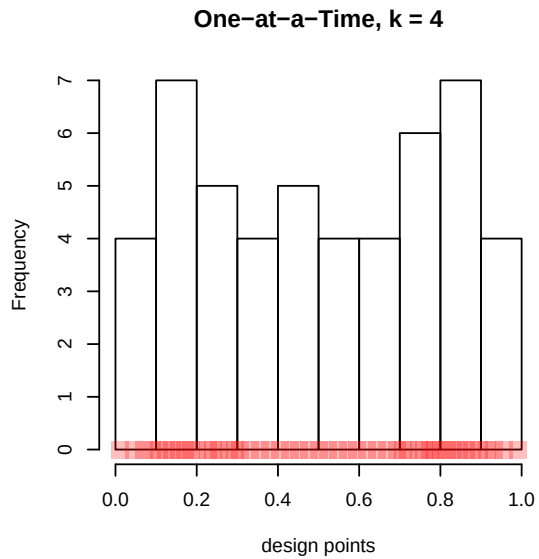
Linear vs. Quadratic

Linear vs. Quadratic



Designs, N = 50


One−at−a−Time, k = 1
Frequency
0
1
2
3
4
5
6
7
0.0
0.2
0.4
0.6
0.8
1.0
design points


One−at−a−Time, k = 4
Frequency
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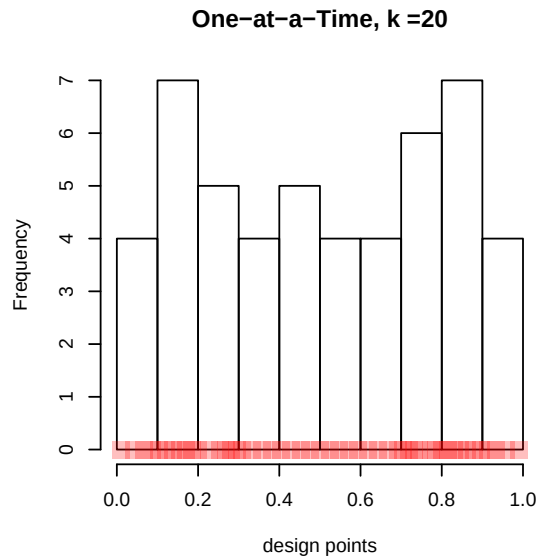
3
4
5
6
7
0.0
0.2
0.4
0.6
0.8
1.0
design points


One−at−a−Time, k =20
Frequency
0
1
2
3
4
5
6
7
0.0
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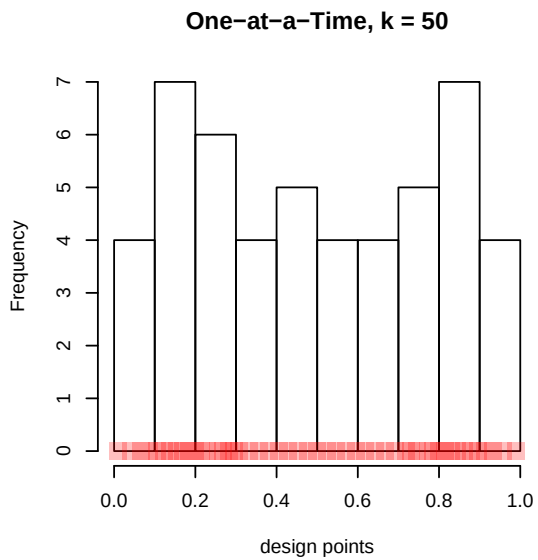
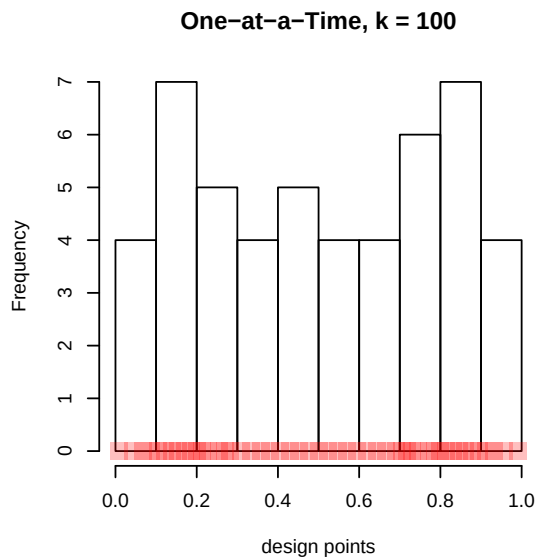
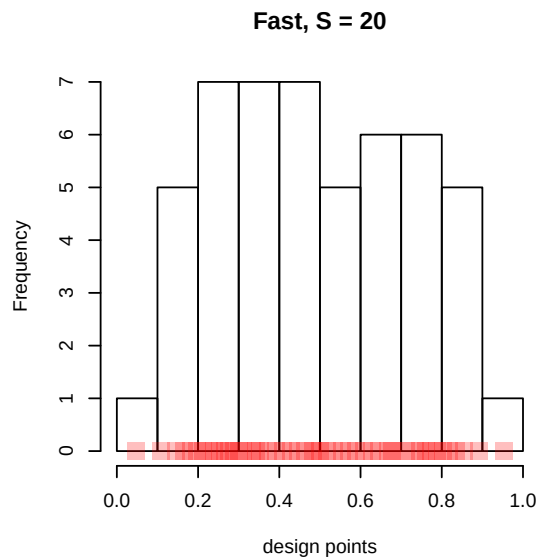
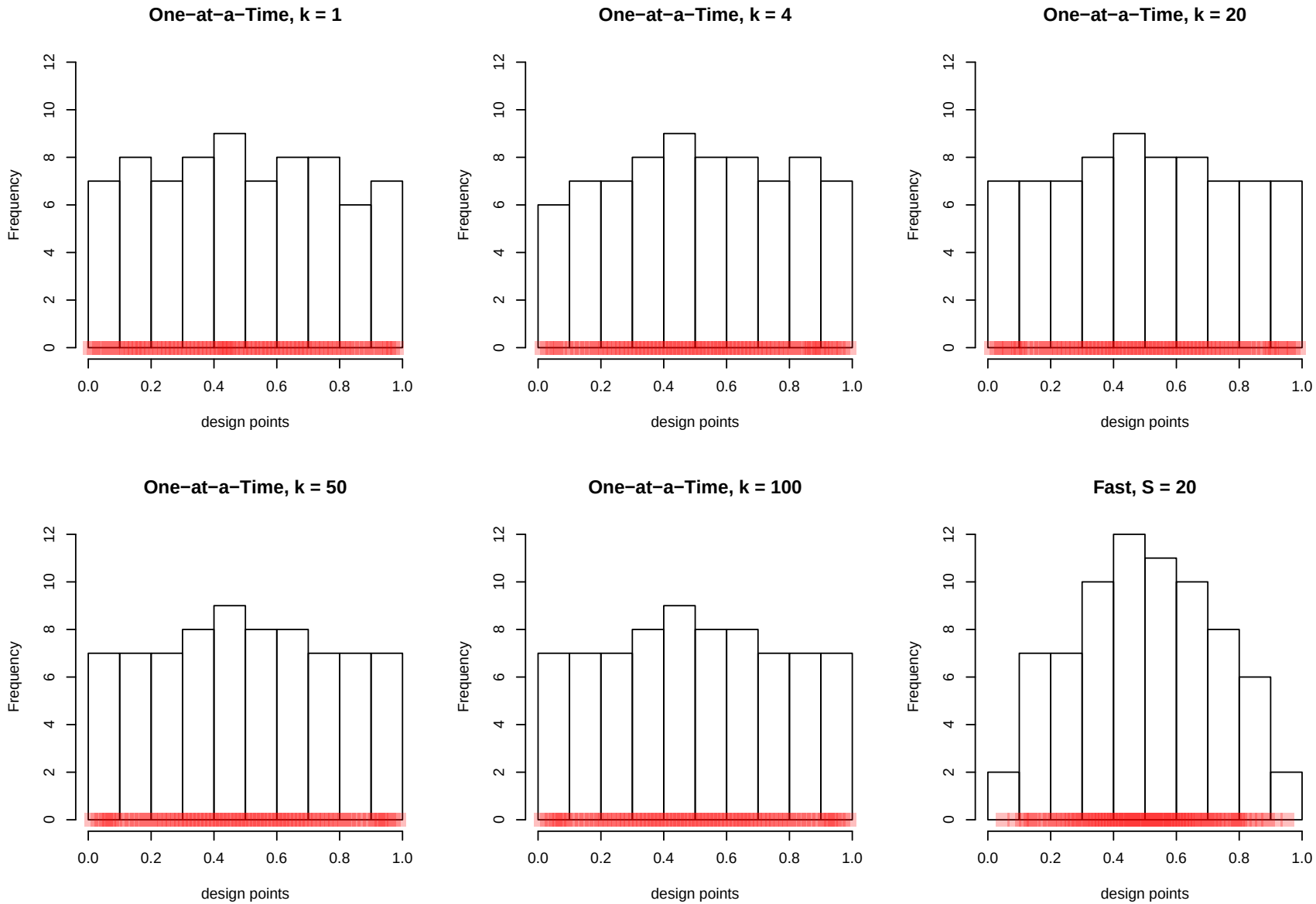
0.4
0.6
0.8
1.0
design points


One−at−a−Time, k = 50
Frequency
0
1
2
3
4
5
6
7
0.0
0.2
0.4
0.6
0.8
1.0
design points


One−at−a−Time, k = 100
Frequency
0
1
2
3
4
5
6
7
0.0
0.2
0.4
0.6
0.8
1.0
design points


Fast, S = 20
Frequency
0
1
2
3
4
5
6
7
0.0
0.2
0.4
0.6
0.8
1.0
design points

Designs, N = 75


One−at−a−Time, k = 1
One−at−a−Time, k = 4
One−at−a−Time, k = 20
One−at−a−Time, k = 50
One−at−a−Time, k = 100
Fast, S = 20
Frequency
design points
0
2
4
6
8
10
12
0.0
0.2
0.4
0.6
0.8
1.0