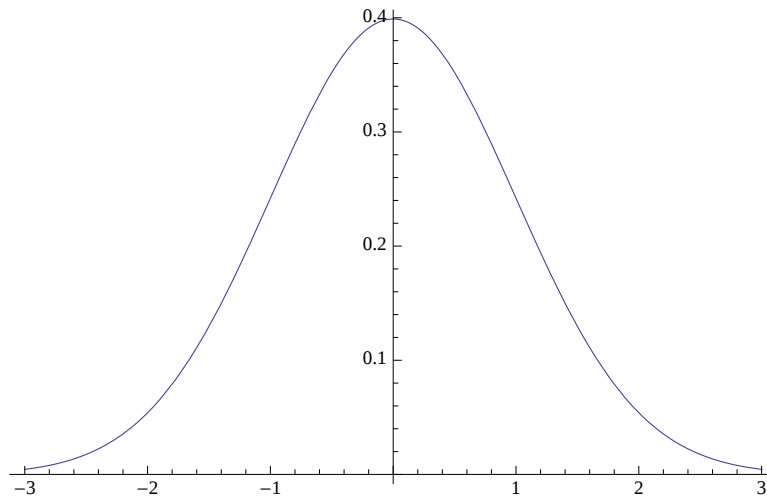


■ sampling from a normal distribution

```
Print["A parent population"]
Plot[PDF[NormalDistribution[0, 1], x], {x, -3, 3}]
```

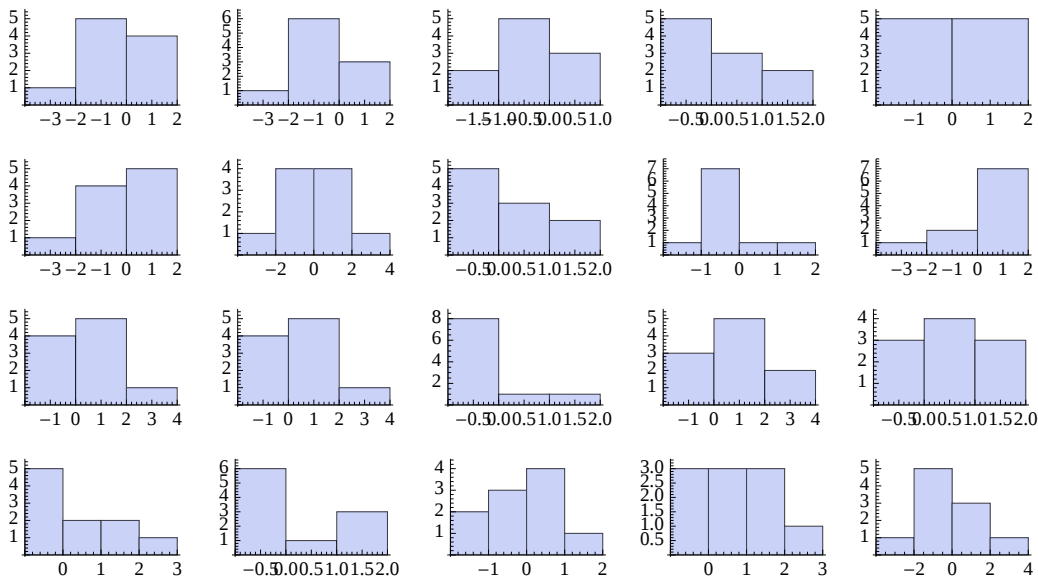
A parent population



```
Clear[nSize, i, j]
nSize = 10;
Print["Samples vary, especially for a small sample size!"]
Print["Samples should resemble their parent population."]
For[i = 1, i ≤ 4, i++,
  Print[GraphicsArray[
    Table[Histogram[RandomReal[NormalDistribution[0, 1], nSize]
      ], {j, 1, 5}]]]]
```

Samples vary, especially for a small sample size!

Samples should resemble their parent population.



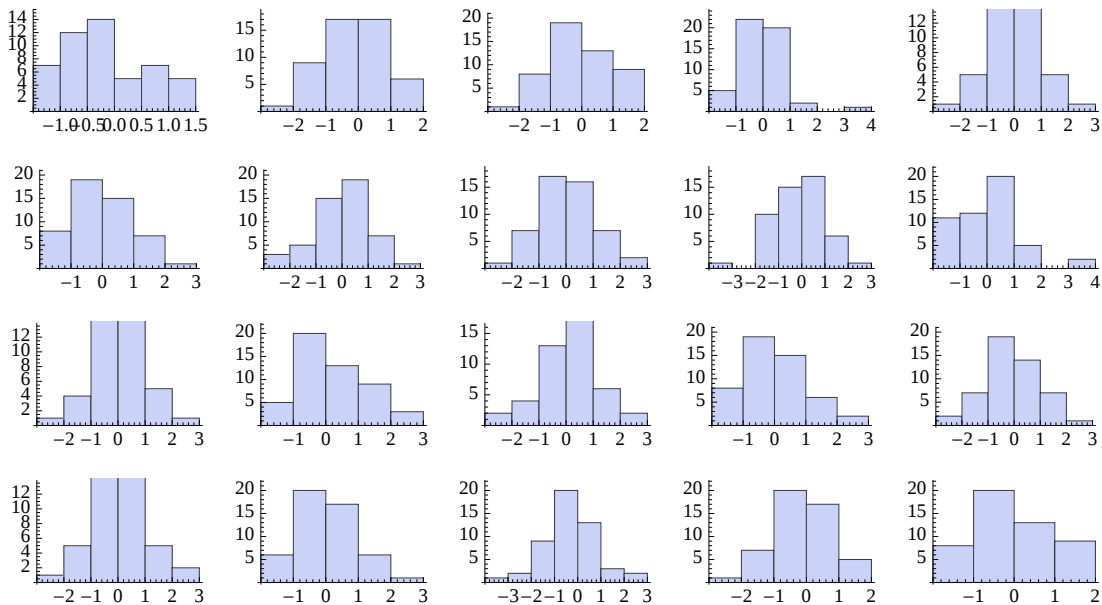
```

Clear[nSize, i, j]
nSize = 50;
Print["Samples vary, less for a moderate sample size."]
Print["Samples should resemble their parent population."]
For[i = 1, i ≤ 4, i++,
  Print[GraphicsArray[
    Table[Histogram[RandomReal[NormalDistribution[0, 1], nSize]
      ], {j, 1, 5}]]]]

```

Samples vary, less for a moderate sample size.

Samples should resemble their parent population.



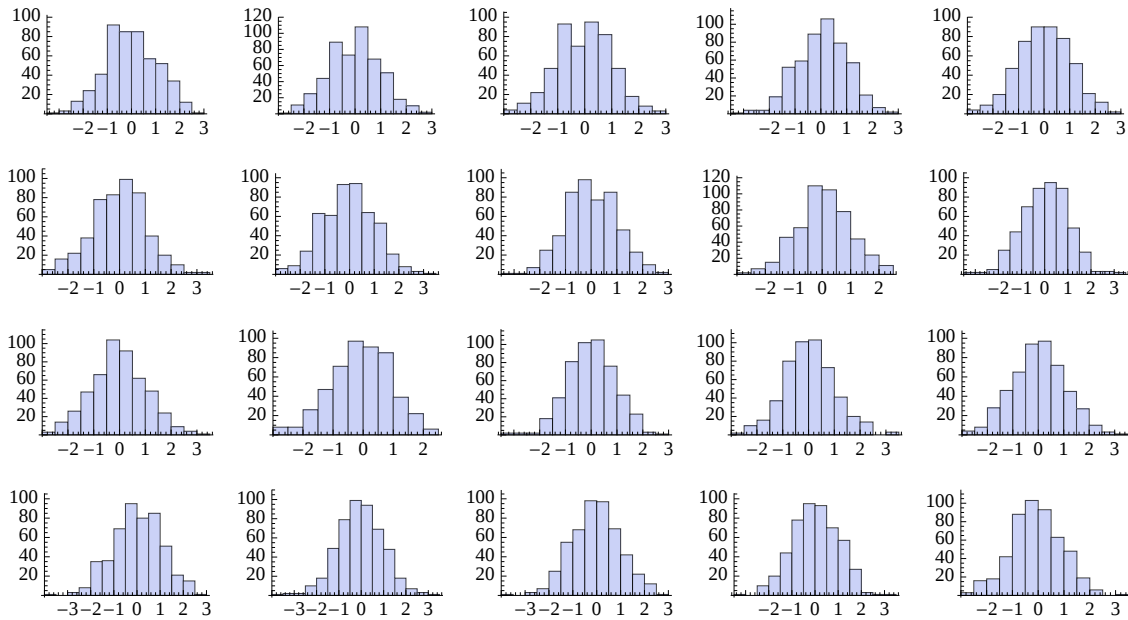
```

Clear[nSize, i, j]
nSize = 500;
Print["Samples vary, less for a large sample size."]
Print["Samples should resemble their parent population."]
For[i = 1, i ≤ 4, i++,
  Print[GraphicsArray[
    Table[Histogram[RandomReal[NormalDistribution[0, 1], nSize]
      ], {j, 1, 5}]]]]

```

Samples vary, less for a large sample size.

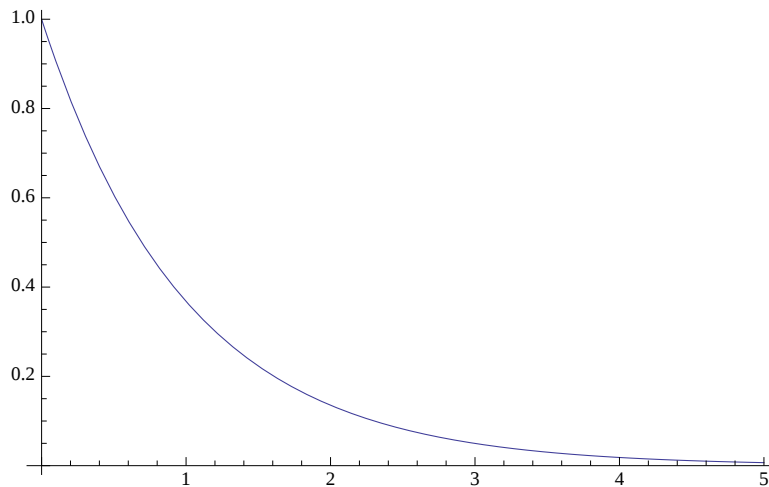
Samples should resemble their parent population.



■ sampling from an exponential distribution

```
Print["A parent population"]
Plot[PDF[ExponentialDistribution[1], x], {x, 0, 5}]
```

A parent population



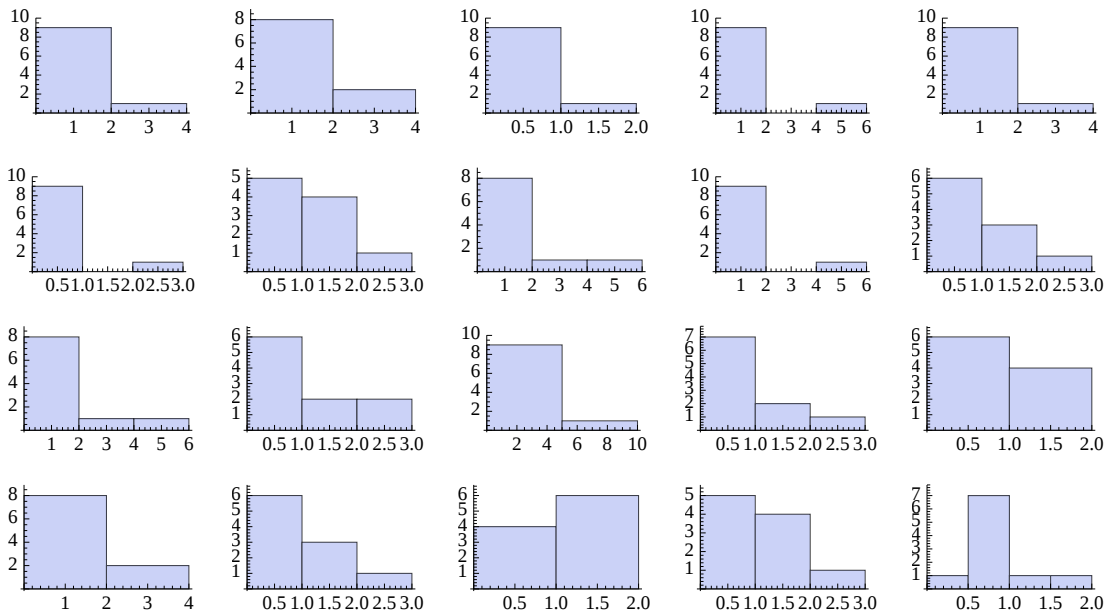
```

Clear[nSize, i, j]
nSize = 10;
Print["Samples vary, especially for a small sample size!"]
Print["Samples should resemble their parent population."]
For[i = 1, i ≤ 4, i++,
  Print[GraphicsArray[
    Table[Histogram[RandomReal[ExponentialDistribution[1], nSize]
      ], {j, 1, 5}]]]]

```

Samples vary, especially for a small sample size!

Samples should resemble their parent population.



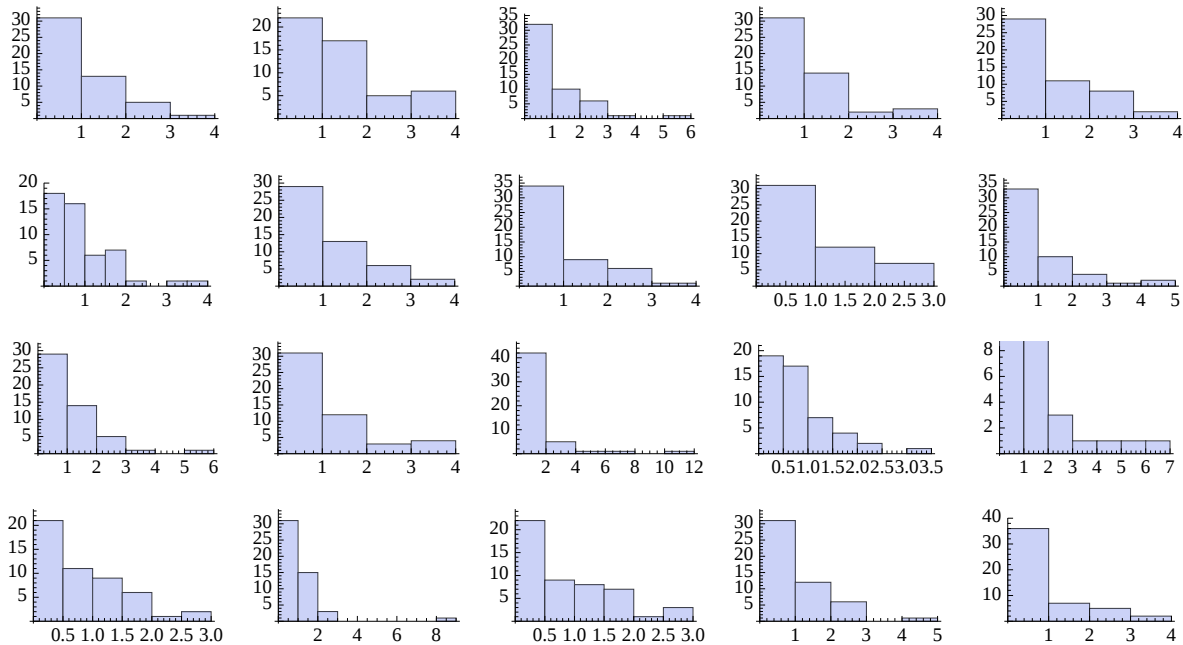
```

Clear[nSize, i, j]
nSize = 50;
Print["Samples vary, less for a moderate sample size."]
Print["Samples should resemble their parent population."]
For[i = 1, i ≤ 4, i++,
  Print[GraphicsArray[
    Table[Histogram[RandomReal[ExponentialDistribution[1], nSize]
      ], {j, 1, 5}]]]]

```

Samples vary, less for a moderate sample size.

Samples should resemble their parent population.



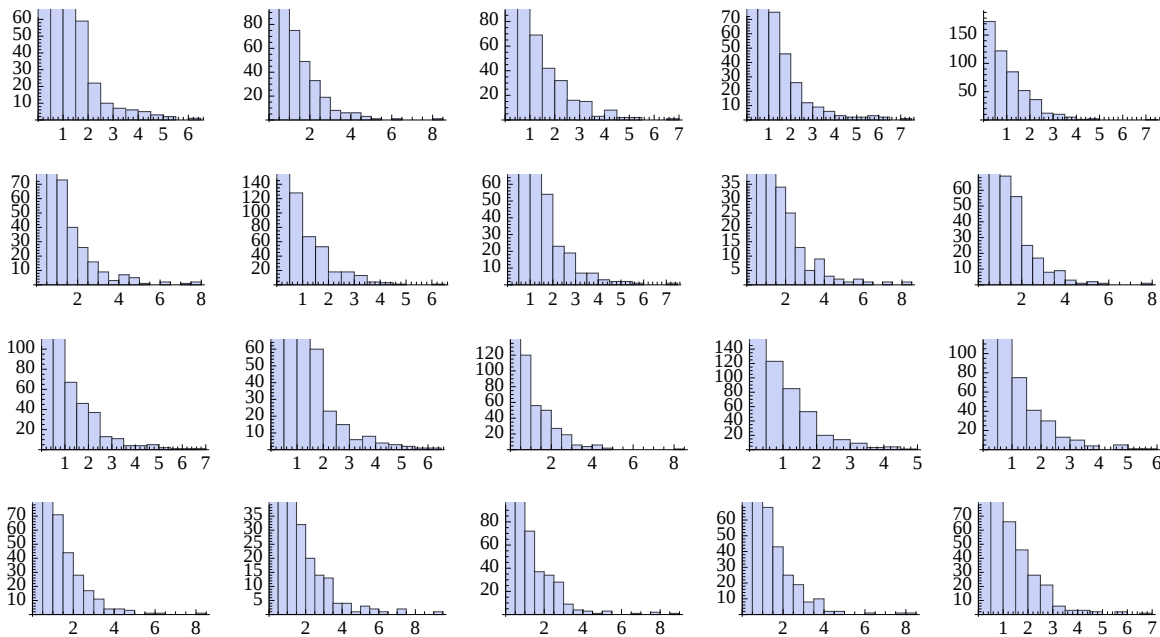
```

Clear[nSize, i, j]
nSize = 500;
Print["Samples vary, less for a large sample size."]
Print["Samples should resemble their parent population."]
For[i = 1, i ≤ 4, i++,
  Print[GraphicsArray[
    Table[Histogram[RandomReal[ExponentialDistribution[1], nSize]
      ], {j, 1, 5}]]]]

```

Samples vary, less for a large sample size.

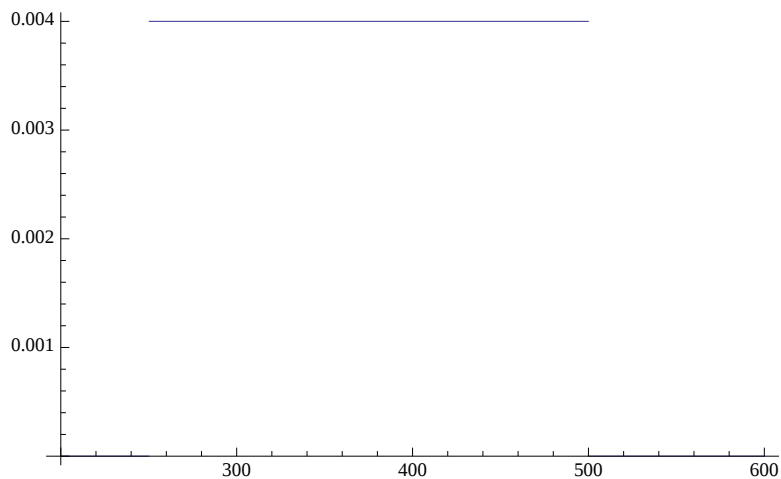
Samples should resemble their parent population.



■ sampling from a uniform distribution

```
Print["A parent population"]
Plot[PDF[UniformDistribution[{250, 500}], x], {x, 200, 600}]
```

A parent population



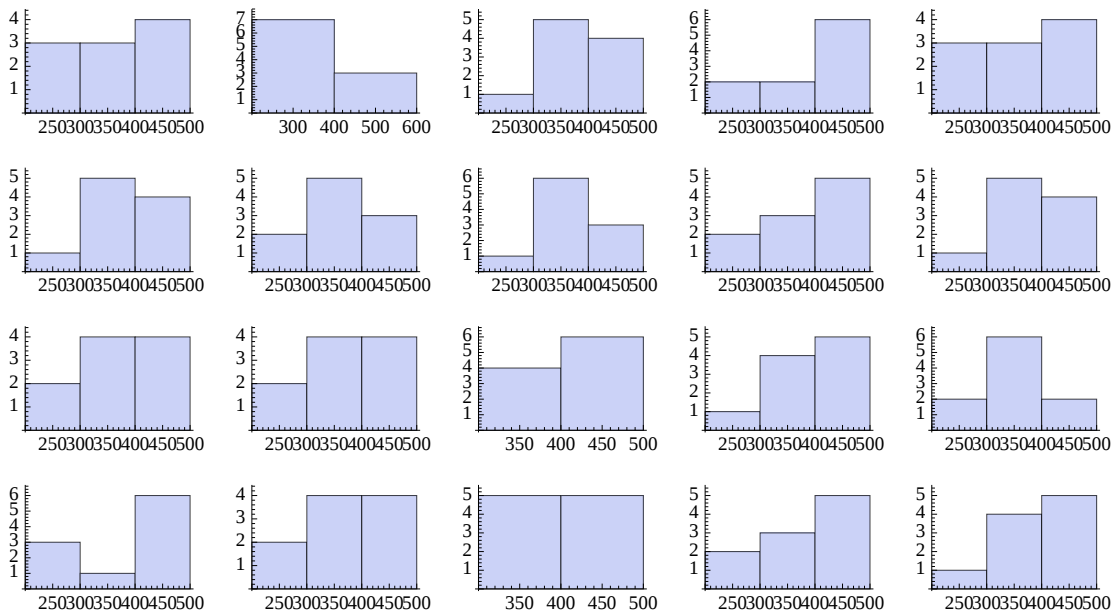
```

Clear[nSize, i, j]
nSize = 10;
Print["Samples vary, especially for a small sample size!"]
Print["Samples should resemble their parent population."]
For[i = 1, i ≤ 4, i++,
  Print[GraphicsArray[
    Table[Histogram[RandomReal[UniformDistribution[{250, 500}]], nSize]
      ], {j, 1, 5}]]]

```

Samples vary, especially for a small sample size!

Samples should resemble their parent population.



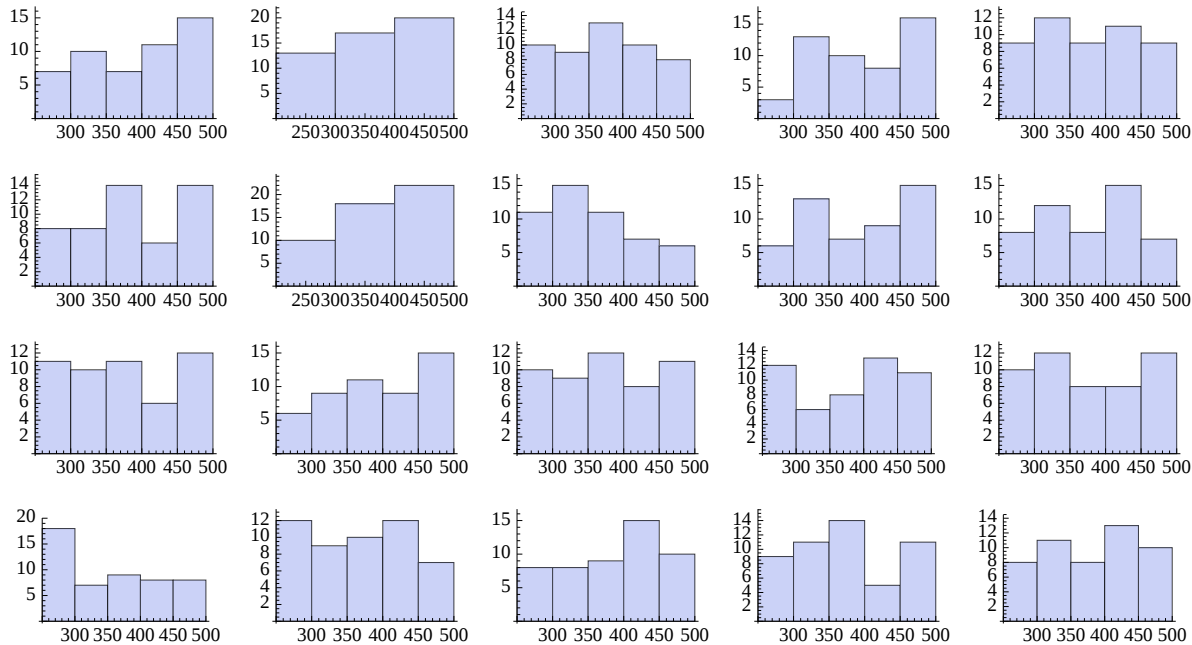
```

Clear[nSize, i, j]
nSize = 50;
Print["Samples vary, less for a moderate sample size."]
Print["Samples should resemble their parent population."]
For[i = 1, i ≤ 4, i++,
  Print[GraphicsArray[
    Table[Histogram[RandomReal[UniformDistribution[{250, 500}]], nSize]
      ], {j, 1, 5}]]]

```

Samples vary, less for a moderate sample size.

Samples should resemble their parent population.



```

Clear[nSize, i, j]
nSize = 500;
Print["Samples vary, less for a large sample size."]
Print["Samples should resemble their parent population."]
For[i = 1, i ≤ 4, i++,
  Print[GraphicsArray[
    Table[Histogram[RandomReal[UniformDistribution[{250, 500}], nSize]
      ], {j, 1, 5}]]
  ]]
```

Samples vary, less for a large sample size.

Samples should resemble their parent population.

