In[•]:=
```
X0 = RandomVariate[UniformDistribution[{0, π / 2}], 10^5]
```

Out[•]=

{0.182695, 1.34232, 0.400945, 1.14304, 0.502582, 0.0572179, 0.970238, 0.499387, 1.15508,
<<99982>>, 0.443514, 0.77998, 0.573759, 1.00027, 1.27782, 0.0558068, 0.0703455, 0.164495, 1.11605}

Full expression not available (original memory size: 0.8 MB)

In[•]:=
```
X = Tan[X0]
```

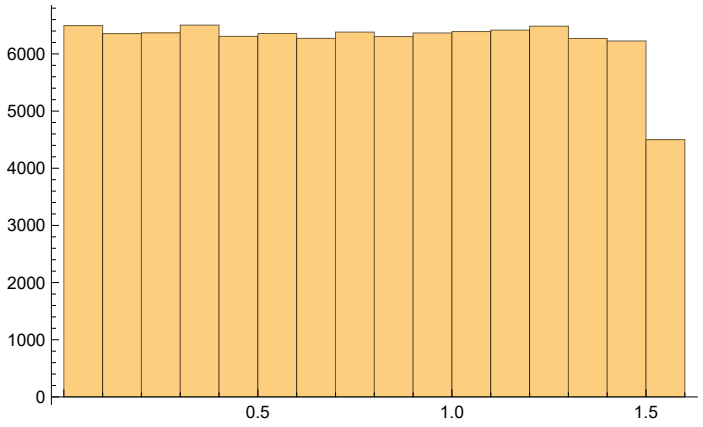
Out[•]=

{0.184755, 4.30037, 0.423908, 2.19342, 0.54966, 0.0572804, 1.45995, 0.545506, 2.2653,
<<99982>>, 0.475081, 0.989222, 0.646285, 1.55834, 3.31502, 0.0558648, 0.0704618, 0.165995, 2.04533}

Full expression not available (original memory size: 0.8 MB)

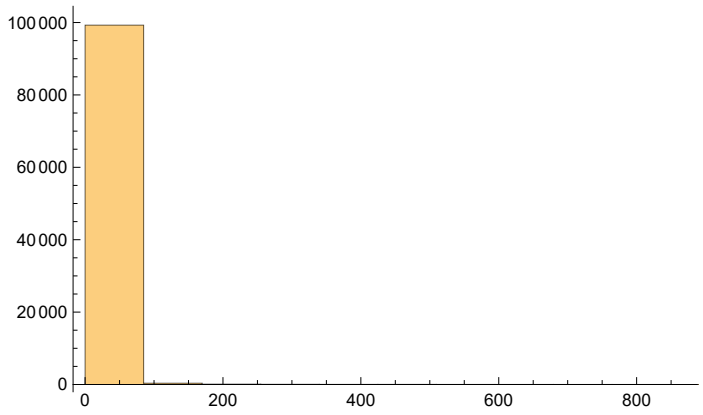
In[•]:=
```
Histogram[X0]
```

Out[•]=



In[•]:=
```
Histogram[X]
```

Out[•]=

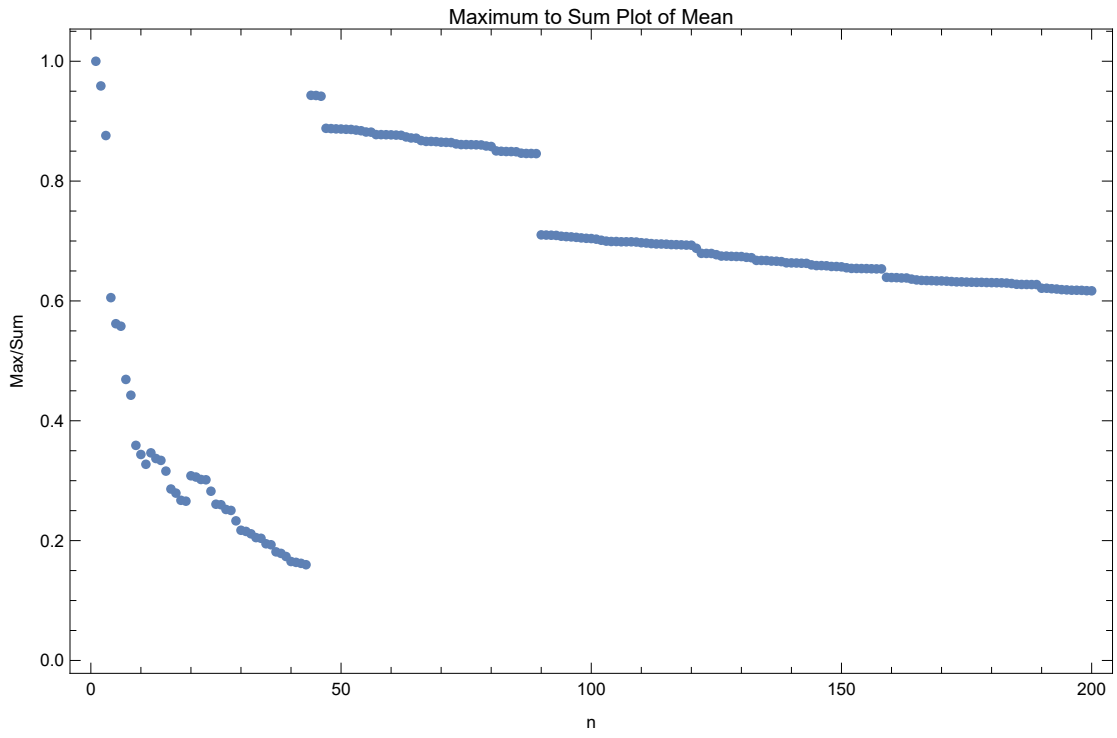


M-S Plot for p = 1

In[•]:=
```
MP[X_, p_, n_] := Max[Table[Abs[X[[i]]]^p, {i, 1, n}]] / (∑_{i=1}^{n} (Abs[X[[i]]]^p));
taMean = Table[{n, MP[X, 1, n]}, {n, 1, 200}];
```

In[•]:=
```
ListPlot[taMean, Frame → True, FrameLabel → {"n", "Max/Sum"},
 PlotLabel → "Maximum to Sum Plot of Mean", ImageSize → Large]
```

Out[•]=



M-S Plot for p = 2

In[•]:=
```
MP[X_, p_, n_] := Max[Table[Abs[X[[i]]]^p, {i, 1, n}]] / (∑_{i=1}^{n} (Abs[X[[i]]]^p));
taVar = Table[{n, MP[X, 2, n]}, {n, 1, 200}];
```

In[•]:=
```
ListPlot[taVar, Frame → True, FrameLabel → {"n", "Max/Sum"},
 PlotLabel → "Maximum to Sum Plot of Variance", ImageSize → Large]
```

Out[•]=