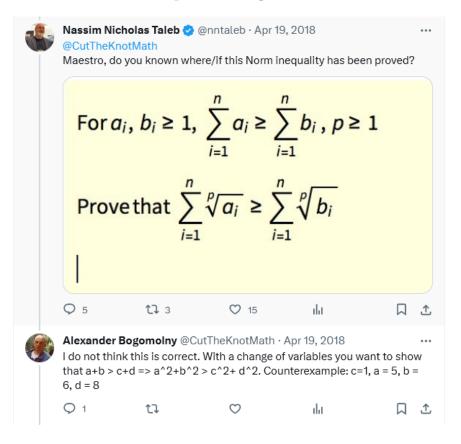
A False Inequality



Verification with Monte Carlo

In[*]:= r := RandomInteger[{1, 10}, 3]

 $\label{eq:local_local_local} $$ b = r; Sign[Total[a] - Total[b]] Sign[Total[a^{1/p}] - Total[b^{1/p}]], {10^6}] /. p \rightarrow 2 // $$ Histogram$

Out[0]=

