**TODO 1**

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| --- | --- |
| **Distribution** | **Histogram** |
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**TODO 2**

From the graph, we can see that the empirical mean is getting closer to 0 as the sample size increases. This implies that the empirical mean is converging to the theoretical mean, which is 0.

A graph of a function

Description automatically generated with medium confidence

**TODO 3**

From the graph, we can see that with the increase of sample size, the approximation given by the histogram is more similar to the true PDF.

|  |  |
| --- | --- |
|  | **Histogram** |
| With |  |
| With |  |
| With |  |
| With |  |