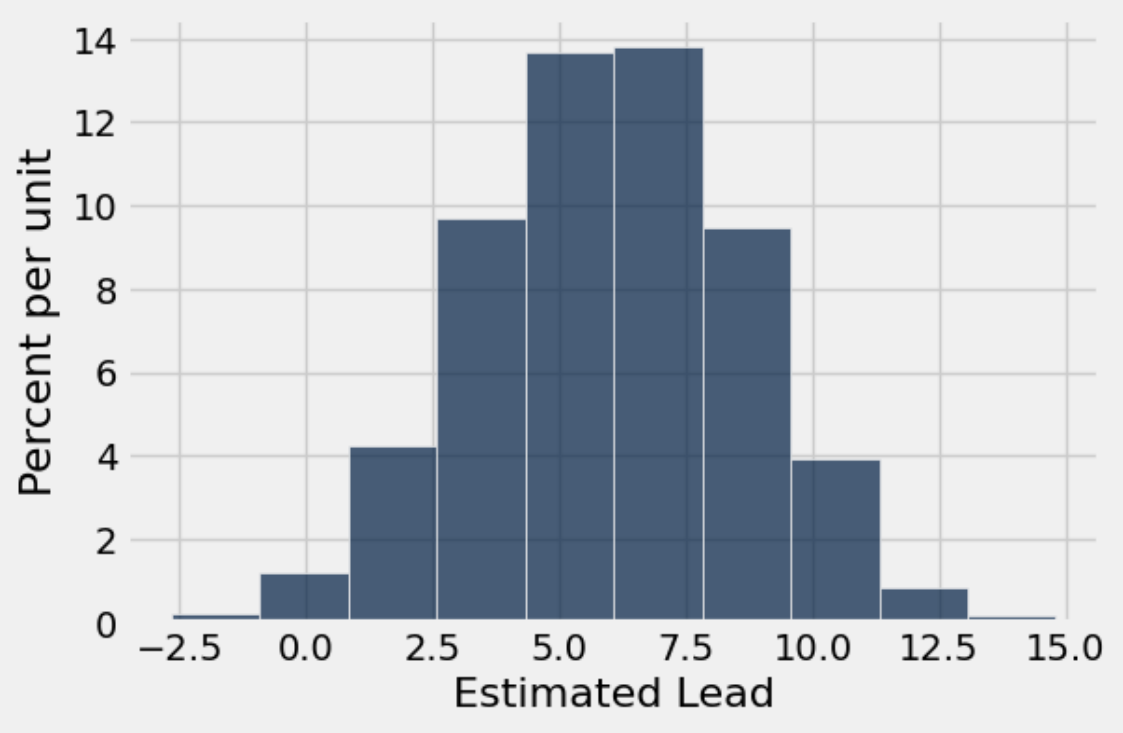

Question 1.5. Write a function called `leads_in_resamples` that returns an array of 2023 elements representing the bootstrapped estimates (the result of calling `one_resampled_difference`) of Imm Thai's lead over Lucky House, Thai Temple, and Thai Basil combined. Afterwards, run the cell to plot a histogram of the resulting samples. **(8 Points)**

Hint: If you see an error involving `NoneType`, consider what components a function needs to have!

```
In [13]: def leads_in_resamples():
             return np.array([one_resampled_difference(votes) for _ in range(2023)])

         sampled_leads = leads_in_resamples()
         Table().with_column('Estimated Lead', sampled_leads).hist("Estimated Lead")
```



Question 2.1. Jonathan also created 70%, 90%, and 99% confidence intervals from the same sample, but he forgot to label which confidence interval represented which percentages! ***First***, **match each confidence level (70%, 90%, 99%) with its corresponding interval in the cell below** (e.g. ___ % CI: [52.1, 54] → replace the blank with one of the three confidence levels). ***Then***, **explain your thought process** and how you came up with your answers. **(10 Points)**

The intervals are below:

- [50.03, 55.94]
- [52.1, 54]
- [50.97, 54.99]

Hint: If you are stuck on this question, try looking over Chapters 13.3 and 13.4 of the textbook.

- 70% CI: [52.1, 54]
- 90% CI: [50.97, 54.99]
- 99% CI: [50.03, 55.94]

Because higher confidence percentages covers wider intervals.