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Lesson 10:
Sampling distributions and the Ce...

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Notebook + Quiz: Bootstrapping

as well as some that involve sampling without replacement.

Bootstrap Sampling

Below is an array of the possible values you can obtain from a die. Let's consider different methods of sampling from these values.

In [15]:

import numpy as np
np.random.seed(42)

die_vals = np.array([1,2,3,4,5,6])
die_vals

Out[15]:

array([1, 2, 3, 4, 5, 6])

1. Take a random sample of 20 values from **die_vals** using the code below then answer the question in the first quiz below.

In [16]:

xy = np.random.choice(die_vals, size=20)
xy

Out[16]:

array([4, 5, 3, 5, 5, 2, 3, 3, 3, 5, 4, 3, 6, 5, 2, 4,
6, 2, 4])

In [17]:

set(xy)

Out[17]:

{2, 3, 4, 5, 6}

2. Use the code below to choose another sample from **die_vals**, then answer the question in the first quiz below.

In [10]:

ab = np.random.choice(die_vals, replace=False, size=ler
ab

Out[10]:

array([1, 2, 6, 3, 5, 4])

NB: Note the value error when the size of the non-
bootstrapped replace = False was 20

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QUESTION 1 OF 2

Question 1.

Use the resulting values from **1.** in the notebook above to select statements here that are true.

☐ Once a value is chosen, it was not able to be selected again.

This sampling is an example of bootstrap sampling.

☐ All of the values were randomly chosen in this sample.

QUESTION 2 OF 2

Question 2.

Select all of the statements that are true about the code you r

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