

Assignment 1

AI1110 Probability and Random Variables

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Question 11.16.3.6: There are four men and six women on the city council. If one council member is selected for a committee at random, how likely is it that it is a woman?

Solution: Let S be the sample space.

A be an event in which the selected council member is a woman.

Now

$$n(S) = 10 \quad (1)$$

$$n(A) = 6 \quad (2)$$

$$\Pr(A) = \frac{n(A)}{n(S)} \quad (3)$$

$$\Pr(A) = \frac{6}{10} \quad (4)$$

$$\Pr(A) = \frac{3}{5} \quad (5)$$