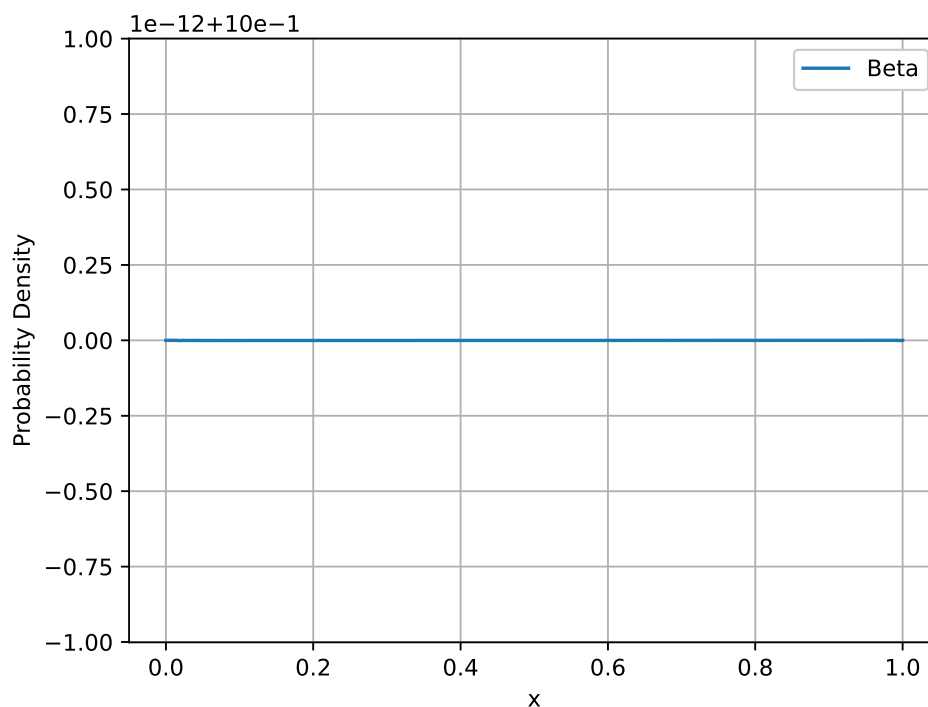# Project Appraisal

Abstract

The purpose of the appraisal is to help the audiences focus on the key concepts of the presented project. For simplicity, the appraisal is in the form of multiple choices and fill-in-the-blank. The appraisal is used as the evidence of presentation evaluation.

Beta Distribution   Grade:

1. Do you understand the derivation of the Beta distribution? _____

2. What is the α and β of the following Beta distribution Plot? _____

3. Do you feel you understand more about the Bayesian Theorem? _____

Bertrand Paradox   Grade:

Consider an equilateral triangle inscribed in a circle. Suppose a chord of the circle is chosen at random. What is the probability that the chord is longer than a side of the triangle? Fill in the blank with the probability of each approach in Bertrand's Paradox.

(a) Choose a random radius of the circle and then choose a random point on this radius for the

midpoint of the chord. _____

(b) Choose two random points on the circle's circumference, and use these as the endpoints of the chord. _____

(c) Choose a random point inside the circle and draw the chord with this as one endpoint and the circle center as the other endpoint. _____

(d) Which approach do you think is the most reasonable? _____

(e) Do you think there is a better approach? _____

Monte Carlo   **Grade:**

1. Do you understand the concept of Monte Carlo simulation? _____

2. Do you understand how π is calculate by Monte Carlo simulation? _____

3. Do you understand how Monte Carlo differ from other simulation methods? _____

Copula   **Grade:**

1. In which condition can we use copula to calculate the joint distribution of random variables? _____

2. Do you think you understand the concept of copula? _____

3. Do you see the limitation of copula? _____