

75. In the paper "Racial Characteristics and the Imposition of the Death Penalty," Radelet (1981) analyzed various factors related to homicide indictments from 1976-1977 in 20 Florida counties. Of the 637 indictments included in this study, 326 were non-primary homicides, meaning that the homicide occurred during the course of another felony. For a randomly selected indictment,

$$X = \begin{cases} 0, & \text{victim is Caucasian} \\ 1, & \text{victim is African American} \end{cases} \quad Y = \begin{cases} 0, & \text{death penalty} \\ 1, & \text{no death penalty} \end{cases}$$

Table 1: Relationship between race of victim and defendant death penalty for non-primary homicides.

Victim's Race	Yes	No
Caucasian	30	184
African American	6	106

Create a table that contains the joint probability function of X and Y using the results from this study. Include the marginal distributions. Briefly discuss your findings.