



Figure 1: A contour plot showing the joint distribution of two variables, X and Y . The x-axis ranges from -10 to 10, and the y-axis ranges from -10 to 10. The plot shows two distinct peaks: a smaller, more diffuse peak on the left (around $X=-5$, $Y=5$) and a larger, more concentrated peak on the right (around $X=5$, $Y=5$). The contours are elliptical and centered on these peaks.



Figure 2: A contour plot showing the joint distribution of two variables, X and Y , with a different shape than Figure 1. The x-axis ranges from -10 to 10, and the y-axis ranges from -10 to 10. The plot shows two distinct peaks: a smaller, more diffuse peak on the left (around $X=-5$, $Y=5$) and a larger, more concentrated peak on the right (around $X=5$, $Y=5$). The contours are elliptical and centered on these peaks.