Estimation Project

方宣翔 Q36104080

**2. The likelihood function given observed data y=6 and sample size n=10.**

**Ans:**

, so



**3. Determine and plot the PMF of y with a given w=0.6.**

**Ans:**



**What are the differences between the PMF and the associated likelihood function?**

**Ans:**

Likelihood function:

PMF:

**Likelihood function** is a function of the parameter given a particular set of observed data, defined on the **parameter scale** . Which is **continous**.

**PMF** is a function of the data given a particluar set of parameter values, defined on the **data scale** . Which is **discrete**.

**4. What is the maximum likelihood (ML) estimate of w for this observed data (y) and sample size (n)?**