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PS 7 - Q1.2

Log likelihood for each second

$$\text{Second 1} \rightarrow \log P(17; \lambda) = \log \left(\frac{e^{-\lambda} \cdot \lambda^{17}}{17!} \right) \\ = -\lambda + 17 \log \lambda - \log(17!)$$

$$\text{Second 2} \rightarrow \log P(8; \lambda) = -\lambda + 8 \log \lambda - \log(8!)$$

$$\text{Second 3} \rightarrow \log P(13; \lambda) = -\lambda + 13 \log \lambda - \log(13!)$$

$$\text{Second 4} \rightarrow \log P(11; \lambda) = -\lambda + 11 \log \lambda - \log(11!)$$

$$\text{second 5} \rightarrow \log P(8; \lambda) = -\lambda + 8 \log \lambda - \log(8!)$$

$$\text{second 6} \rightarrow \log P(11; \lambda) = -\lambda + 11 \log \lambda - \log(11!)$$

$$\text{second 7} \rightarrow \log P(16; \lambda) = -\lambda + 16 \log \lambda - \log(16!)$$

$$\text{second 8} \rightarrow \log P(7; \lambda) = -\lambda + 7 \log \lambda - \log(7!)$$

$$\text{second 9} \rightarrow \log P(15; \lambda) = -\lambda + 15 \log \lambda - \log(15!)$$

$$\text{second 10} \rightarrow \log P(13; \lambda) = -\lambda + 13 \log \lambda - \log(13!)$$