Problem 5 (Respiratory Rate for Children) (60 pts)

A high respiratory rate is a potential diagnostic indicator of respiratory infection in children. To judge whether a respiratory rate is truly “high”, however, a physician must have a clear picture of the distribution of normal respiratory rates. To this end, Italian researchers measured the respiratory rates of 618 children between the ages of 15 days and 3 years. Analyze that data and provide a statistical summary. Include a useful plot or chart that a physician could use to assess a normal range of respiratory rate for children of any age between 0 and 3.

(units of age in months and respiratory rate in number of breaths per minute)