1. a. $Q_1 = 6.05$, $Q_3 = 12.9$, IQR=6.85
   b. Median=9.20
   c. Skewed to the right
      Mean>Median
   d. $Z = \frac{X - 10.03}{4.99}$
   e. 3.40
   f. The observation 27 is 3.40 standard deviations above the mean.
   g. Smaller. The observation 27 is unusually large hence by removing it, the mean decreases.

2. a. Fairly symmetric. Mean is close to median.
   b. Approximate range for children’s weight in 1st village: 4.10
      Approximate range for children’s weight in 2nd village: 6.80
   c. Less. Range$_1$ < Range$_2$.
   d. Approx average weight for children in 1st village: 14.1 kgs
      Approx average weight for children in 2nd village: 15 kgs
      Smaller.

3. a. x-y plot (not shown).
   b. Negative. When age increases, peak heart rate decreases.
   c. $S_{xx} = 425.60$, $S_{yy} = 642.10$, $S_{xy} = -485.40$, $r = -0.9285$.

4. a. 0.3448
   b. 0.3333
   c. 0.8966
   d. 0.1034
   e. No, because $P(M|A) \neq P(M)$. Note: there are other possible answers to the explanation as to why A and M are not independent.