Home Assignment Worksheet

1. The graphical representations below were used to show certain clinical, health & social data. Identify each type of chart, giving a *brief description* of *the type* in each case.
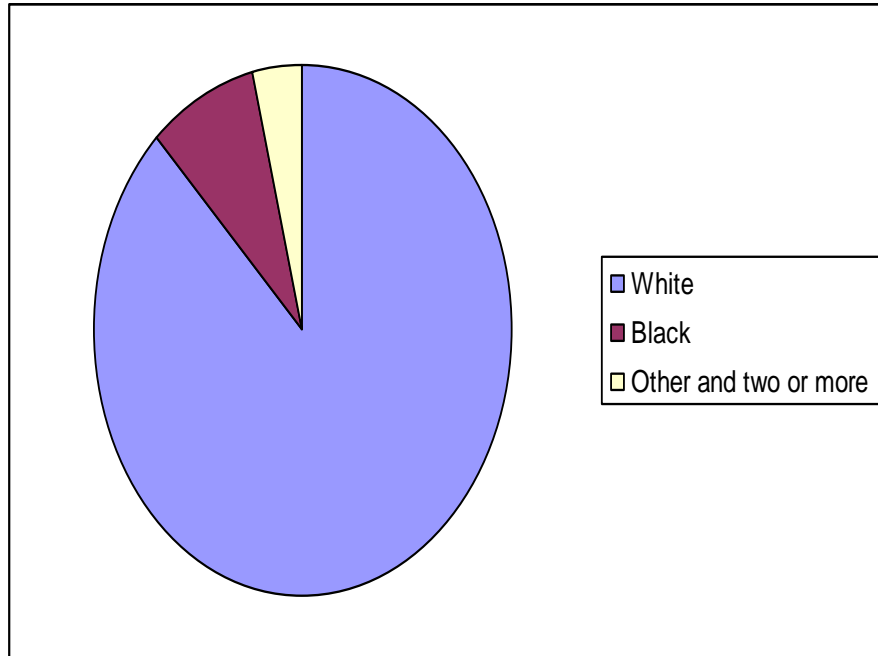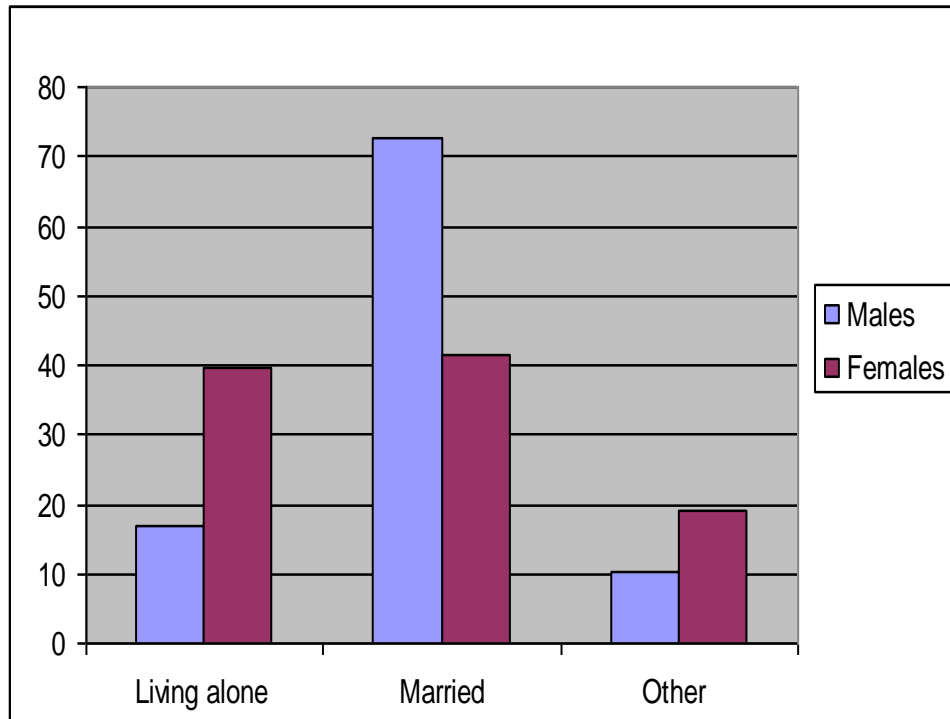

Figure 1

Figure 2

Population of Japan, Age 55 and Over, 2000, 2010, and 2020
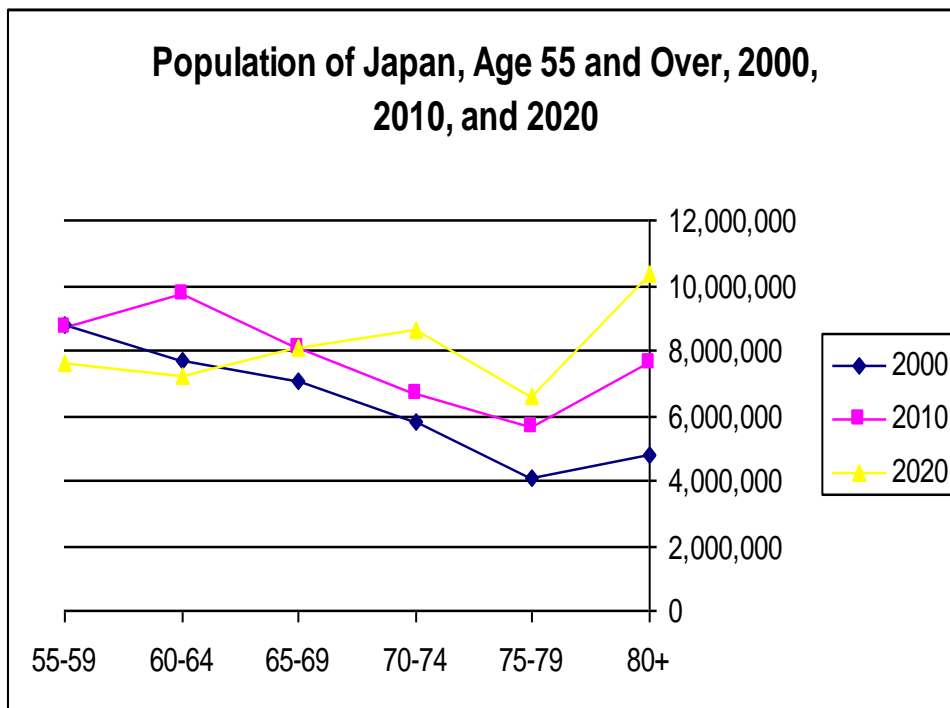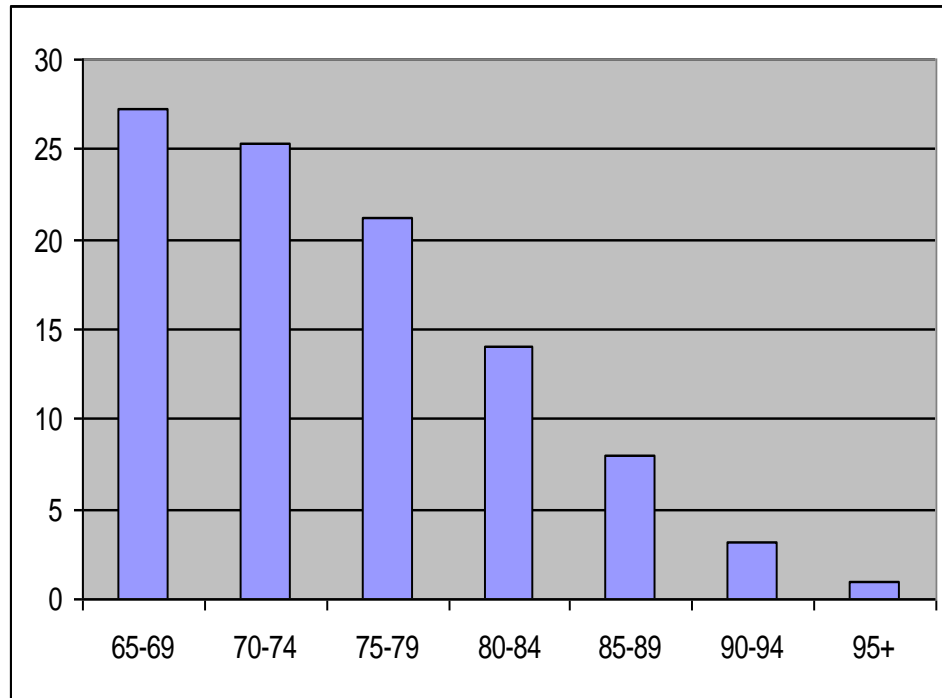
Figure 3

Figure 4

2. The Welcher Adult Intelligence Test Scale is composed of a number of subtests. On one subtest, the raw scores have a mean of 35 and a standard deviation of 6. Assuming these raw scores form a normal distribution:
a) What proportion of raw scores are between 28 and 38?
b) What proportion of raw scores are between 41 and 44?

3. In a random survey of 3,015 boys age 11, the average height was 146 cm, and the standard deviation (SD) was 8 cm. A histogram suggested the heights were approximately normally distributed. Fill in the blanks. [2x5= 10 marks]
a. One boy was 170 cm tall. He was above average by _____ SDs.
b. Another boy was 148 cm tall. He was above average by _____ SDs.
c. A third boy was 1.5 SDs below the average height. He was _____ cm tall.
d. If a boy was within 2.25 SDs of average height, the shortest he could have been is _____ cm and the tallest is _____ cm.
e. Here are the heights of four boys: 150 cm, 130 cm, 165 cm, 140 cm.
Which description from the list below best fits each of the boys (a description can be used more than once)? Justify you answer
– Unusually short.
– About average.
– Unusually tall.