M12U3 Statistics

Cornerstone 1 Assessment

1. The data below shows the scores obtained by 30 students in a game.

0	3	3	6	8	9	9	10	10	11
5	0	7	6	9	10	12	17	5	4
2	5	8	8	10	11	7	8	12	11

    a. Using 3 scores as a size of class interval, construct a frequency distribution table for its data. Find the mean, median, and the modal class.

    b. Construct a dot plot of the data obtained.

2. The table below shows the age of factory workers in 2001.

Age (year)	20-25	26-31	32-37	38-43	44-49	50-55	56-61
Number of workers	5	24	16	20	13	12	10

    a. Draw a histogram and estimate the mode of the data.
    b. Find the median.

3. A high school has two cricket teams, a junior and a senior team. The junior team consists of 17 players (including reserves), and the senior team consists of 16 players (including reserves). The mass of each team member is given below. Use the data to answer the questions that follow.

    Junior Team masses (kg)
    {56, 60, 67, 45, 51, 53, 64, 49, 56, 48, 42, 51, 64, 52, 64, 49, 50}

    Senior Team masses (kg)
    {88, 81, 53, 62, 83, 68, 70, 62, 91, 78, 64, 74, 73, 54, 62, 62}

    a. What is the mean mass of the senior team?
    b. Determine the mode of the masses of the senior team.
    c. Determine the median mass of the senior team members.
    d. Calculate the mean of the masses of the junior team, correct to 1 dp.
    e. Calculate the median of the masses of the junior team.

f. Calculate the mode of the masses of the junior team.
g. Which measure/s do you think give the best measure of the real 'average' of each set of data?