Workshop Questions

1. (a) Find the mean, mode, median, range and standard deviation of the following two sets of test scores.

| Test 1 | 50 | 55 | 58 | 59 | 60 | 63 | 65 | 70 |
|--------|----|----|----|----|----|----|----|----|
| Test 2 | 38 | 51 | 60 | 68 | 75 | 84 | 89 | 95 |

(b) What do you think is better, a score of 68 on Test 1 or a score of 90 on test 2?

2. Find the mean, mode and median and standard deviation for the following frequency distribution.

| $x$ | $f$ |
|-----|-----|
| 3 | 2 |
| 4 | 4 |
| 5 | 3 |
| 6 | 1 |

3. Colin and Rose play a zero-sum game with the following payoff matrix, with Colin choosing the column strategies and Rose choosing the rows.

|   | A | B | C | D |
|---|---|---|---|---|
| A | -1 | -2 | 2 | 1 |
| B | 2 | 3 | -3 | 0 |

(a) A class is polled as to what choice they would make if they were playing Colin. Four students choose A, twenty choose B, twenty-five chose C and one chose D. What are the relative frequency of each of Colin's strategies choices.

(b) Suppose Colin chooses to play his strategies with probability given by the relative frequencies calculated above. What will Rose's average payoff if she choose to play strategy A? What will be her average payoff if she chooses strategy B?