

Access to Science, Engineering and Agriculture:
Mathematics 1
MATH00030
Chapter 8 Exercises

1. For each of the following lists of numbers, find the

- (i) Mean
- (ii) Median
- (iii) Mode
- (iv) Variance
- (v) Standard deviation
- (vi) Interquartile range

- (a) $-3, -9, 6, 2, 1, 2, 6$.
- (b) $-3, -4, -9, -2, -5, -6, -6, -7$.
- (c) $3, 3, 4, 2, 1, 5, 2, 10, 0$.
- (d) $-7, -2, -4, -6, 0, 4, 2, -5, -3, 7$.

2. Find the following lines of best fit.

- (a) Find the line of best fit using the least squares method with the points $(-2, -1), (0, 0), (2, 1), (4, 3), (6, 3), (8, 4), (10, 4), (12, 5)$ and $(14, 5)$.
Plot the line of best fit and the points on a graph.
- (b) Find the line of best fit using the least squares method with the points $(-3, 3), (-2, 4), (0, 3), (1, 2), (2, 3), (5, 3), (6, 1), (7, 2), (9, 1), (12, 1)$ and $(13, 0)$.
Plot the line of best fit and the points on a graph.