

**MATU9D2: PRACTICAL STATISTICS
WEEKLY ASSIGNMENT 3**

This should be submitted via your tutor's box outside **room 4B89**. Ensure that you have the Course Name, your Name and Practical Group clearly marked on your answers. Your answers should be submitted by.

Tuesday Group:
Thursday Groups:
Friday Groups:

12noon on Friday 10th February
4pm on Tuesday 14th February
4pm on Wednesday 15th February

All calculations should be performed by hand and calculator (*not computer*). Include all working.

1. Twelve slimmers on a special diet made the following weight losses (in pounds) in 6 months

15.3	24.8	25.9	10.7	9.4	12.0
22.1	38.7	24.5	12.3	27.6	31.2

$$\sum x = 254.5 \qquad \sum x^2 = 6339.6$$

Assume that weight losses are Normally distributed.

Does this diet produce greater weight losses than the standard diet known to produce normally distributed weight losses with a mean of 15 pounds? Assume that σ , standard deviation, is known to be 9 pounds.