

- 11 In the past the masses of new-born babies in a certain country were normally distributed with mean 3300 g. Last year a publicity campaign was held to encourage pregnant women to improve their diet.

Following this campaign, it is required to test whether the mean mass of new-born babies has increased. A random sample of 200 new-born babies is chosen, and it is found that their mean mass is 3360 g. It is given that the standard deviation of the masses of new-born babies is 450 g.

Carry out the test at the 2.5% significance level.

[7]