

2. Bea believes that 20% of letters are sent by 1st class post.
Marco claims that less than 20% of letters are sent by 1st class post.

Marco and Bea decide to carry out an appropriate hypothesis test using a 5% significance level.

- (a) Write down appropriate null and alternative hypotheses for their test.

(1)

Marco and Bea take a random selection of 25 letters and find that 1 letter was sent by 1st class post.

- (b) (i) Showing your working, find the critical region for their test.
(ii) State the conclusion of their test.

(4)