

Problem 1:

A drug company claims that their new drug relieves migraine 70% of the time.

A newspaper investigates this claim by getting migraine sufferers to try the new drug. They get 100 results that say it relieves migraine 62% of the time.

What could the newspaper say about this?

What could the newspaper headline be?

Problem 2:

A teacher claims that 30% of second level students in Ireland are 180 cm or taller.

(i) If we treat the 200 results from our school as the results of a simple random sample of all second level students then what is the overall margin of error of the survey, at 95% confidence?

(ii) Of the students in the sample above, 34 are 180 cm or taller. Is this sufficient evidence to reject the teacher's claim, at the 5% level of significance?
