

8 The results of a survey at a certain large college show that the proportion of students who own a car is $\frac{1}{4}$.

- (i) Five students at the college are chosen at random. Find the probability that at least four of these students own a car. [3]

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- (ii) For a random sample of n students at the college, the probability that at least one of the students owns a car is greater than 0.995. Find the least possible value of n . [3]

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[illegible]

- (iii) For a random sample of 160 students at the college, use a suitable approximate distribution to find the probability that fewer than 50 own a car. [4]

[illegible]