

**6** In Questa, 60% of the adults travel to work by car.

**(a)** A random sample of 12 adults from Questa is taken.

Find the probability that the number who travel to work by car is less than 10. [3]

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**(b)** A random sample of 150 adults from Questa is taken.

Use an approximation to find the probability that the number who travel to work by car is less than 81. [5]

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(c) Justify the use of your approximation in part (b). [1]

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