Question 35 (7 marks)

The Intelligence Quotient (IQ) scores for adults in City *A* are normally distributed with a mean of 108 and a standard deviation of 10.

The IQ scores for adults in City *B* are normally distributed with a mean of 112 and a standard deviation of 16.

(a) Yin is an adult who lives in City *A* and has an IQ score of 128. **2**

What percentage of the adults in this city have an IQ score higher than Yin's?

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(b) There are 1 000 000 adults living in City *B*. **2**

Calculate the number of adults in City *B* that would be expected to have an IQ score lower than Yin's.

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Question 35 continues on page 39