**3.** For a particular type of bulb, 36% grow into plants with blue flowers and the remainder grow into plants with white flowers. Bulbs are sold in mixed bags of 40

Russell selects a random sample of 5 bags of bulbs.

(a) Find the probability that fewer than 2 of these bags will contain more bulbs that grow into plants with blue flowers than grow into plants with white flowers.

Maggie takes a random sample of *n* bulbs.

Using a normal approximation, the probability that more than 244 of these n bulbs will grow into blue flowers is 0.0521 to 4 decimal places.

(b) Find the value of *n*.

(6)

(4)

(Total 10 marks)