13			N(5000×0.26, 5000×0.26×0.74) may be implied = N(1300, 962) 1300–2×√"962" (= 1238) or 1300 – 1.96×√"962" (= 1239) P(X < 1239) or P($X \leq$ 1238) or P(X < 1240) or P($X \leq$ 1239) P($X \leq$ 1238) = 0.0233 OR P($X \leq$ 1239) = 0.0251 P($X \leq$ 1238) = 0.0233 AND P($X \leq$ 1239) = 0.0251 AND Largest n is 1239 or $n \leq$ 1239 Example of incorrect method: 1300 – 2×√"962" (= 1238) P(X < 1239) = 0.0251 P(X < 1238) = 0.0233 Largest n is 1239 SC 4	**M1** **M1** **M1** **A1** **A1** **[5]**	**3.1a** **3.3** **3.4** **1.1** **2.2a**	or $\phi^{-1}(0.025)$ May be implied or –1.96 or 1239(.2) seen One of these attempted, by Binomial or Normal **BC** Correct P($X \leq$ 1238) &P($X \leq$ 1239) seen and conclusion. Example of inadequate method: 1300 –1.96×√"962" (= 1239) or inv Bin(0.025) = 1239 Largest n is 1239 SC 4	or, using Binomial not Normal, B(5000, 0.26) soi M1 Attempt P(X < n) for 1230$\leq n \leq$ 1250 or inverse Bin (0.025) (= 1239) M1 **Allow 0.0232 instead of 0.0233** If use normal to find these probs (0.0265 & 0.0246) A0A0 **NB If two methods used, mark the better one.** **NB:** **SC 1239, no working or incorrect or inadequate working,** **SC: 4 marks out of 5**