

Q39 $p = 1/3$, $n = 8$

The req prob. of securing a distinction
ie to get correct answer to at least 6
out of 8 = $P(X \leq 6)$.

Q40 $p = \frac{1}{4}$, $n = 7$

① $P(X \leq 2)$

② $P(X \leq 1) > \frac{2}{3}$

$1 - P(0) > \frac{2}{3}$ Take log & simplify.

Q41