QUESTION
Recalculate the initial premiums if the options of question 1 are binary options which pay

$$payoff(S_r) = \begin{cases} \$1, & S_r \geq K \\ o, & S_r < K \end{cases}$$

ANSWER
Binary formulae are:
Call= $e^{-r(T-t)}N(d_2)$
Put= $e^{-r(T-t)}(1 - N(d_2))$
Use data of question 1 at $t = 0$: $d_2 = -0.7271, N(d_2) = 0.2327$
Therefore call price at $t = 0 = e^{-0.05} \times 0.2327 = 0.2214$
put price at $t = 0 = e^{-0.05} \times (1 - 0.2327) = 0.7299$