**שאלה 1:**

1. We will bound from above the sum of probabilities of playing arm 2 at times when event (i) occurs, using Hoeffding’s inequality:
2. We will bound from above the sum of probabilities of always playing arm 2 when event (ii) occurs, by using the relevant algorithm definition & Hoefding’s bound:

*\* The last two equations are based on our calculations from Question a, and Hoefding’s bound.*

1. We will calculate the regret using only :