**Credit Markets – Homework 5**

**Matheus Raka Pradnyatama**

**Problem 2. a)**

For the premium leg,

If

Therefore,

We have the geometric sum formula:

Applying it here:

Therefore,

For the default leg,

For

**Problem 2. d)**

From Page 22 in Lecture 4

*Intuition:*

* *If there are originally 100 people in a boat*
* *Only 70 people survived from time 0 to time T 🡪*
* *Only 30 people survived from time 0 to time T+10 🡪*
* *There are 40 people that died from time T to time T+10 🡪*

We know that:

Therefore,