Applied Analysis: Financial Mathematics – Assignment 3 – Nadine Enning (2559610)

1. 1. Afbeelding
   2. Afbeelding
   3. Since , the energy is 0 in the start. It is also known that and , which means that the energy cannot be negative and that the slope of the energy level is never positive. This means that the energy level cannot go up from the starting point, which is equal to zero, onwards and the energy level cannot be negative, so .

As long as is continuous and , it can also be concluded that .

Now that you know that , it can be stated that , which leads to the following: .