

Week 4 Sequences and Series Continued Lecture Note

Notebook: Computational Mathematics

Created: 2020-04-21 2:48 PM

Updated: 2020-05-01 5:39 PM

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| Cornell Notes | Topic: Sequences and Series Continued | Course: BSc Computer Science |
| | | Class: Computational Mathematics[Lecture] |
| | | Date: May 01, 2020 |
| Essential Question: | | |
| What is a series? | | |
| Questions/Cues: | | |
| <ul style="list-style-type: none">What is a series? | | |
| Notes | | |
| <h2>Series</h2> <ul style="list-style-type: none">Consider again a generic sequence $\{a_n\}$ with $n=0,1,2,\dots$ we can look at the sum of its elements $a_0, a_0+a_1, a_0+a_1+a_2, a_0+a_1+a_2+a_3,\dots$These sums define another sequence $\{s_n\}$ $n=0,1,2,\dots$ with $s_n=a_0+a_1+\dots+a_n \rightarrow s_0=a_0, s_1=a_0+a_1, s_2=a_0+a_1+a_2, \dots$$\{s_n\}$ is called a series, it is a type of sequence that is obtained as sum of the elements of another sequenceA series is also indicated with $\sum \rightarrow s_n=\sum_{i=0}^n a_i$ | | |
| Summary | | |
| In this week, we learned about what a series and how it necessary to have an original sequence in order to construct a series. | | |

