## PartialSum.Howard

ehoward2

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## 1 My Partial Sum

$$\sum \frac{\sqrt{x+3}+7}{\ln x+3}$$

## 2 Convergence or Divergence?

First Partial Sum- I think that the first partial sum diverges because when you look at the first and last 15 terms the numbers are still increase which leads me to believe that the function diverges.

Second Partial Sum- I think that the second partial sum converges to somewhere around 1.02. When looking at the first and last 15 terms of the sequence they are all around 1.01 something so that leads me to believe that they all converge to 1.02.

Third Partial Sum- I think my partial sum diverges. When you look at the first and last 15 terms of the sequence the number are constantly increasing leading me to believe that the function is diverging.

## 3 The amount of terms

I use 1000 as the amount of terms because then I was getting a broad enough range of terms while not making it to much.