

TI-85 and TI-86 PROGRAM: PARTIAL SUM OF P SERIES  
(remember to press ENTER at end of each line)

KEY IN	DISPLAY	EXPLANATION
PRGM EDIT PSUM	Prgm: PSUM	Program named "PSUM"
<i>Disp</i> "ααVALUE OF P"	Disp "VALUE OF P"	The P in the p-series
<i>Input</i> αP	Input P	After ?, type in the desired P
<i>Disp</i> "ααINITIAL INDEX"	Disp "INITIAL INDEX"	
<i>Input</i> αM	Input M	After ?, type in the desired initial index M
<i>Disp</i> "ααLARGEST INDEX"	Disp "LARGEST INDEX"	
<i>Input</i> αJ	Input J	After ?, type in the desired final index J
φ STO S	φ → S	φ is stored in location S (S = partial sum of series)
M STO N	M → N	N will be variable index; its smallest value is M
<i>For</i> (αN,1,αJ,1)	For (N,1,J,1)	Start of loop, with N increasing by 1 until N = J
αS + 1/αN ^ αP STO αS	S + 1/N ^ P → S	The sum S is increased by 1 / N <sup>P</sup> and renamed S
<i>End</i>	End	End of the loop
<i>Disp</i> "ααJ-N+1 PARTIAL SUM"	Disp "J-N+1 PARTIAL SUM"	
<i>Disp</i> αS	Disp S	Displays the desired partial sum $\sum_{n=m}^j 1 / n^P$

To execute the program, key in PRGM, find the program, and follow the ?'s that appear.

EXPRESSIONS IN ITALICS ABOVE:

*Disp* can be found under I/O

*Input* can be found under I/O

*For* can be found under CTL

*End* can be found under CTL

“ can be founded under I/O MORE

φ represents zero (distinguished from the letter 0)

If you type α(-) then you get a "space" (between two words) — here (-) is the "negative" key