

AP Calculus
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Program RSUMS

This program, written for the TI-83, will calculate Riemann sums for any function continuous on $[A, B]$ entered into the $Y=$ menu under Y_1 . You will be prompted for the lower and upper limits and the number of intervals over which you desire to calculate the Riemann sum.

```
: Disp "LOWER LIMIT"  
: Input A  
: Disp "UPPER LIMIT"  
: Input B  
: Disp "DIVNS"  
: Input N  
: A→X  
: 0→S  
: 1→I  
: (B-A)/N→H  
: Lbl P  
: S+H*Y1→S  
: X+H→X  
: IS>(I,N)  
: Goto P  
: Disp "LEFT SUM"  
: Disp S  
: S→T  
: S+Y1*H→S  
: A→X  
: S-Y1*H→S  
: Disp "RIGHT SUM"  
: Disp S  
: Disp "AVERAGE"  
: Disp (S+T)/2
```