TI-82, 83, 83+

SIMPSON'S RULE SUM PROGRAM

```
Disp "ENTER YOUR FN"
Disp "IN Y 1"
Disp "WHAT IS N?"
Prompt N
Disp "LOWER LIMIT?"
Prompt A
Disp "UPPER LIMIT?"
Prompt B
(B-A)/N→D
Ø→S
For(I,1,N-1,2)
S+4*Y1(A+D*I)→S
End
For(I,2,N-2,2)
S+2*Y1(A+D*I)→S
End
S+Y1(A)+Y1(B)→S
D*S/3→S
Disp "SIMPSONS SUM IS"
Disp S
Stop
```

"HOW MANY INTERVALS?"

TRAPEZOID RULE PROGRAM

```
Disp "ENTER YOUR FN"
Disp "IN Y 1"
Disp "N EQUALS WHAT?"
Prompt N
Disp "LOWER LIMIT?"
Prompt A
Disp "UPPER LIMIT?"
Prompt B
Ø→S
(B-A)/N→D
For(I,Ø,N)
S+Y1(A+I*D)→S
End
For(I,1,N-1)
S+Y1(A+I*D)→S
End
D*S/2→T
Disp T
Stop
```

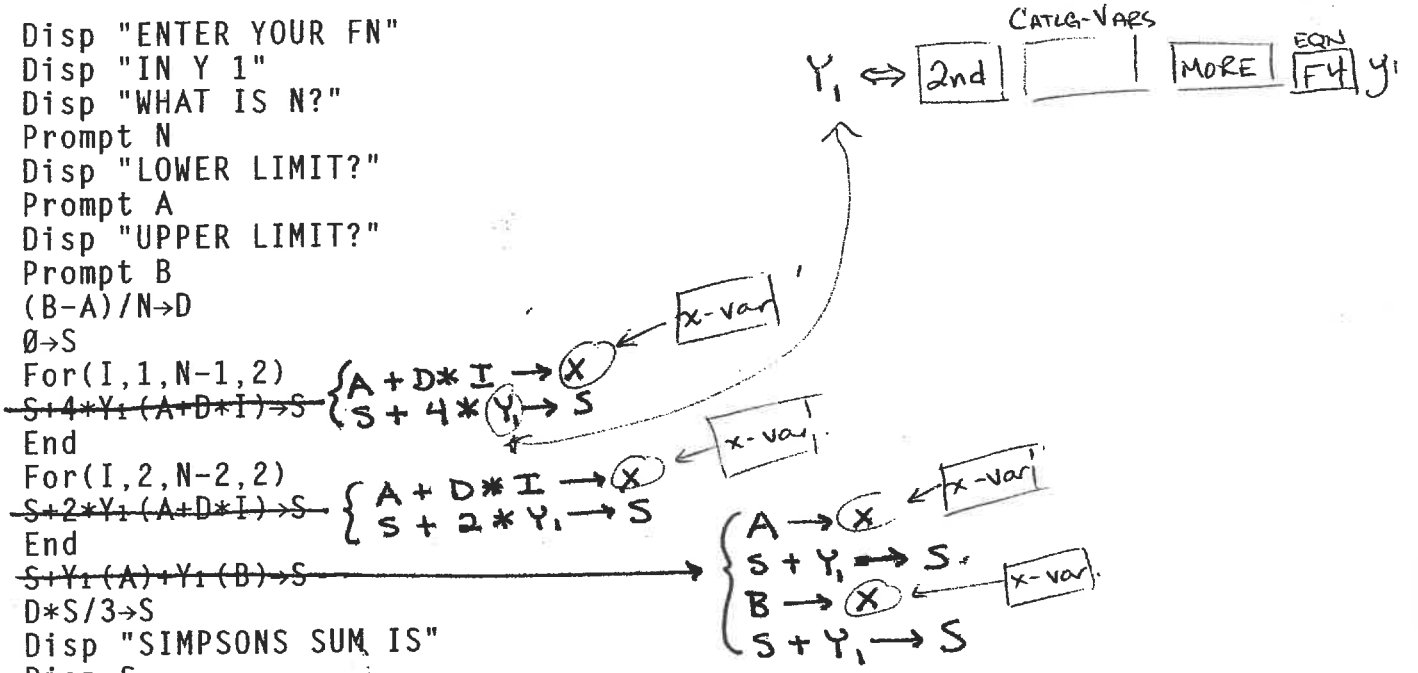
"HOW MANY INTERVALS?"

Disp "Trapezoid Sum is"

TI-85,86

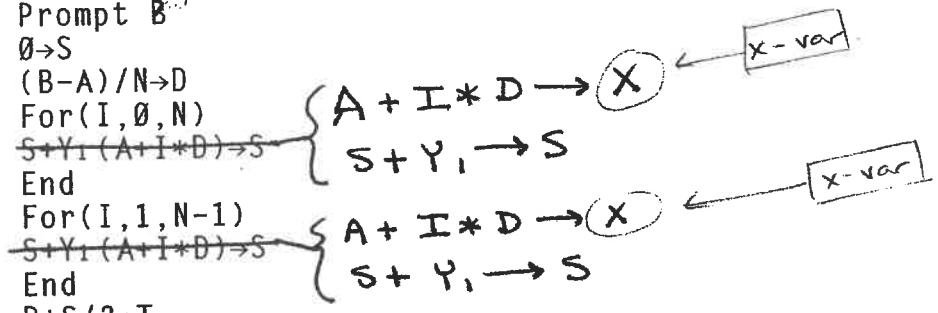
SIMPSON'S RULE SUM PROGRAM

```
Disp "ENTER YOUR FN"
Disp "IN Y 1"
Disp "WHAT IS N?"
Prompt N
Disp "LOWER LIMIT?"
Prompt A
Disp "UPPER LIMIT?"
Prompt B
(B-A)/N→D
0→S
For(I,1,N-1,2)
S+4*Y1(A+D*I)→S
End
For(I,2,N-2,2)
S+2*Y1(A+D*I)→S
End
S+Y1(A)+Y1(B)→S
D*S/3→S
Disp "SIMPSONS SUM IS"
Disp S
Stop
```



TRAPEZOID RULE PROGRAM

```
Disp "ENTER YOUR FN"
Disp "IN Y 1"
Disp "N EQUALS WHAT?"
Prompt N
Disp "LOWER LIMIT?"
Prompt A
Disp "UPPER LIMIT?"
Prompt B
0→S
(B-A)/N→D
For(I,0,N)
S+Y1(A+I*D)→S
End
For(I,1,N-1)
S+Y1(A+I*D)→S
End
D*S/2→T
Disp T
Stop
```



TI-89, 92

```
SIMPSON'S RULE SUM PROGRAM
Simpsons( )
Prgm                          Local N,A,B,D,S,I
Disp "ENTER YOUR FN"
Disp "IN Y 1"
Disp "WHAT IS N?"
Prompt N
Disp "LOWER LIMIT?"
Prompt A
Disp "UPPER LIMIT?"
Prompt B
(B-A)/N→D
0→S
For(I,1,N-1,2)      For I,1,N-1,2
S+4*Y1(A+D*I)→S
End                 End For
For(I,2,N-2,2)      For I,2,N-2,2
S+2*Y1(A+D*I)→S
End                 End For
S+Y1(A)+Y1(B)→S
D*S/3→S
Disp "SIMPSONS SUM IS"
Disp S
Stop
EndPrgm
```

```
TRAPEZOID RULE PROGRAM
Trapezoid( )
Prgm                          Local N,A,B,S,D,I,T
Disp "ENTER YOUR FN"
Disp "IN Y 1"
Disp "N EQUALS WHAT?"
Prompt N
Disp "LOWER LIMIT?"
Prompt A
Disp "UPPER LIMIT?"
Prompt B
0→S
(B-A)/N→D
For(I,0,N)          For I,0,N
S+Y1(A+I*D)→S
End                 End For
For(I,1,N-1)        For I,1,N-1
S+Y1(A+I*D)→S
End                 End For
D*S/2→T
Disp T
Stop
EndPrgm
```