

Error with Exercise 7

Here is the corrected problem: The sine integral function as stated is NOT a function, it is a constant.

The corrected function (which is actually built into Maple) is:

$$\text{Si}(x) = \int_0^x \frac{\sin(t)}{t} dt$$

Since it is built into Maple, you don't need to re-define it. For example, here are the commands to plot the function and differentiate it, and solve for where the derivative is zero:

```
plot(Si(x),x=0..8);  
dF:=diff(Si(x),x);  
solve(dF=0,AllSolutions=true);
```

What you see is something like:

$$\pi(2_Z1\sim +_B1\sim)$$

How do we interpret this? Formally, Z_1 represents an integer, and B_1 is 0 or 1. Put together, this is a weird way of stating "Integer multiples of π ".

In Exercise 7, part (d), use **fsolve** to numerically solve for the first time the second derivative is zero (use the graph to give Maple an interval on which the solution exists).