

Problem:

- a) Estimate $\ln(3)$ without using a calculator with the first four terms of a Taylor series approximation.
- b) Write the numbers in the formula you would use in order to find the fractional percent error, but do not compute.

Another problem:

- a) what would `"=Smithapprox(1,7,9)"` do in an Excel spreadsheet related to Visual Basic?

Another problem:

- a) How do you define a variable in Visual Basic so that it will hold more numbers than the default? You may use the variable `Number` in an example.
- b) If you were to see a Visual Basic program that had:

```
sum = 0
for I = 1 to 5
    sum = sum + I
next I
```

what would you expect the final result to be?

- c) What would you add to the above program to send the result back to your spreadsheet if the function were called `Counting`?

Another exam:

What would be the result of the following function in VisualBasic (from CC Handout 1)?

```
i = 3
prod = 1
    For j = 1 To (2 * i + 1)
        prod = prod * j
    Next j
```

Another problem:

Describe what the Taylor series approximation does.