**Question 14.1: Reference Check**

In order to check our approximation of sin(2.618) you first need to calculate the analytical value (I.e. true value) of sin(2.618). What is the sin(2.618) equal to?

**Question 14.2: An Example For Loop**

Consider the code:

sneetches = 0;

for stars = 0:5:25

sneetches = sneetches + stars;

end

How many times will the code inside this for-end loop be executed?

**Question 14.3: An Example For Loop**

Consider the code:

sneetches = 0;

for stars = 0:5:25

sneetches = sneetches + stars;

end

What is the value of the

sneetches

variable when this code is run?

**Question 14.4: Analyze the array**

For this problem, consider the code:

sum = 0;

man\_bear\_pig = ​[1, 6, 2, 1, 4, 2, 9, 5, 3, 9, 2, 1, 4, 2, 7, 3];

for index = 1:2:length(man\_bear\_pig)

sum = sum + man\_bear\_pig(index);

end

Consider the 3rd pass through this loop. What is the value stored in

man\_bear\_pig(index)

on the 3rd pass through this loop?

**Discussion 14.1: What is your flowchart?**

For this discussion, upload a picture of your flowchart or write out your pseudocode that you came up with to solve the Maclaurin series "number of terms" problem described directly above. The coding part might be difficult but I have faith in your ability to come up with the algorithm! Take your time and think through it!

**Question 14.5: How many terms?**

Using your script (or the solution shown in figure 14.13 above) how many terms are necessary to get better than 99% accuracy when using the Maclaurin series expansion for sin(x) when estimating x=1.874 radians?

**Personal Reflection – Chapter 14**

What do you think about the content of this chapter? Did you at least attempt the challenge question? Why or why not? Do you think the content in this chapter makes sense? Do you see the logical progression and can you anticipate what we are going to learn next? Do some personal reflection about your learning.

**Request for Feedback – Chapter 14**

What did you think of this chapter? Anything stand out as exceptionally good? Anything that you would like to see differently? Any feedback is appreciated.