Digest 4

(A compilation of emailed homework questions, answered around Tuesday.)

Question. (From a student): I keep answering 1 for this question in wileyplus but it says my answer is wrong. Why is that?

Let $f(x) = \ln(x)$. Use intervals of length .1 to estimate $f'(1)$.

Answer. As we will show in class, $f'(x) = 1/x$, so that the exact answer for $f'(1)$ is 1, but this is not what the question is asking. They probably didn't state this question in the best way, but it asks you to estimate $f'(1)$ by computing

$$\frac{f(1+h) - f(1)}{h}$$

where $h = .1$. Since $f'(1)$ is equal to the limit of this quantity as $h \to 0$, this quantity when $h = .1$ gives an approximation to $f'(1)$. Anyway, when $h = .1$ this quantity is not exactly 1 (though it is close to 1), so the online system says it is wrong because 1 is far enough away from this quantity to register as an incorrect answer.

Question. (From a student): In the homework policy, it states that the lowest two online homework scores will be dropped. As each section of WileyPlus is graded individually on blackboard, I'm writing to ask whether the grade drop refers to a whole week's worth of homework (i.e. Online Homework 7) or rather just two sections of homework (i.e. Sections 6.1-6.4).

Answer. There are twelve online homeworks corresponding to twelve weeks. Two of those weeks of homework are dropped. So, yes, even though there will be roughly thirty total "assignments" in wileyplus at the end of the semester corresponding to different subsections of the textbook, that number of "assignments" is irrelevant for computing the two dropped homeworks.