## Test 3 Information

(Modified) Available from Fri. Apr. 5 through Fri. Apr. 12 in the NRG Testing Center. One page of notes in your own handwriting) allowed. No examples. See 8-D handout for formulas, etc. to be provided.

The ideas here are very important. For all four sections of Chapter 8 , study the Quick Quizzes and the questions about "does it make sense." Give reasons. (On the test, be prepared to identify a good reason from a list.)

Wed. April 3. Come prepared to discuss ANY questions you have on the four sections' "Quick Quiz" and "Does it make sense." This means you should have thought of a good reason for each and be prepared to discuss it. (See answer key at the end of this handout to supplement the answer key in the book.)

When working problems to get a numerical answer, perhaps the most important thing to consider is how to tell, from the statement of the problem, what formula is relevant for solving the problem. So, as you go through these problems, please be sure to find what in the statement of the problem itself tells you which formula to use. Of course, it might be in the instructions before the problem. Just don't use the section you are in as a clue - you won't have that information on the test.

Some details:

- Discussion of logarithms.
- 8-B. While I do expect you to be able to use your calculator to compute logs, I will not test on problems from 8B 13-24. I expect to give one test problem, worth no more than 6 points, where you have to use the exact formula for doubling time or half-life. For all the other questions about doubling time or half-life, you will use the rule of 70 (which might mean saying that it is not recommended because the rate is above $15 \%$.)
- 8-D. I do expect you to use logs in the formulas from this section of the classwork. However, problems from this section will be no more than $15 \%$ of the test.
- 8-C Logistic growth
- I expect you to understand the ideas of logistic growth, carrying capacity, etc.
- The harder problems in section 8-C that I expect you to be able to do are those like 1721.
- I will not test on the problems from 8C (23-32) that involve you first finding the base rate and then using that in a step where you find the growth rate at a particular point. Instead, when asking you about logistic growth, I will give you the base rate, as in 21, where the base rate is given and then you find the growth rate at a particular point.

Extra answers:
8-A. 5. Makes sense. 6. Makes sense 7. Makes sense 8. Does not make sense.
8 -B. 9. Does not make sense. 10. Makes sense 11. Does not make sense 12. Makes sense.
8 -C. 7. Makes sense 8 . Makes sense 9 . Does not make sense 10 . Does not make sense 11. Does not make sense 12. Does not make sense.

8 -D. 5. Does not make sense 6 . Does not make sense 7 . Does not make sense 8. Does not make sense.

HW 9 and Quiz 9: Due March 27 at the beginning of class.
8A : $1,3,5,6,7,8,9,13,15,17,23,25,29$
8B: $9,10,11,12,15,17,19,21,25,29,31,33,35,37,43,45,49,55,57$

Quiz 9: 8A: 18 8B: 22, 40, 50

HW 10 and Quiz 10. Due Wed. April 3 at the beginning of class

8C: $1,2,3,4,5,6,8,9,11,13,15,19,20,21,23,25,27$ (for a person 17 years old in 2009), 29, 33

8D: $1,3,4,5,7,9,11,13,15,19,23,25,27,31,33,35,37,39$
Quiz 10: $8 \mathrm{C}: 16,28,34$ 8D: 6,8

