TRUE ________ 1. An absence for a non-acute medical service or regular check-up does not constitute an excused absence. For injury or illness too severe or contagious to attend class, you must provide confirmation to me of a visit to a health care professional affirming date and time of visit.

TRUE ________ 2. To be excused you must notify me (acknowledged email or written) *prior* to date of absence if such notification is feasible. Consistent with Texas A&M Student Rules, students are required to notify their instructor by the end of the second working day after missing an examination or assignment; otherwise, they forfeit their rights to a make-up.

TRUE ________ 3. My instructor highly recommends the week-in-reviews, help sessions, office hours, attending class, doing my suggested and required homework, and keeping up with the material. My instructor cares and she wants me to learn the material.

TRUE ________ 4. On exam days, I need to have with me either a TI-83 Plus or TI-84 Plus graphing calculator model, my Texas A&M student id, a pencil and an eraser. Other calculators are not allowed. It is recommended that you have an extra set of calculator batteries in your backpack on exam days. [The answer to this one is true!]

TRUE ________ 5. It is scholastic dishonesty to have notes, formulas, applications, or programs in my calculator other than those allowed by my instructor. The calculator must be reset before all exams.

TRUE ________ 6. For all my Math 131 classes, it is my responsibility to have my TI-83 Plus or TI-84 Plus graphing calculator with me. No sharing of calculators during exams or quizzes. State any special features or programs you use on your calculator as showing your work (for example: LinReg L1, L2, Y1).

TRUE ________ 7. It is my responsibility to check my tamu email each day and to read my emails from my instructors and from the university.

______________ 8. (10pts) In a fairy tale the number of dozens of logs above the water is \( g(t) = 0.25t - 13.5 \) where \( t \) is the temperature in degrees hobbits for \( 70 \leq t \leq 90 \), and \( n(t) = 0.3t - 19 \) is the number of frogs per log where \( t \) is the temperature in degrees hobbits for \( 70 \leq t \leq 90 \). Find and simplify the model for the \( Q \) number of frogs based upon the temperature \( t \).

\[
Q(t) = \left( \text{number of logs} \right) \left( \frac{\text{number of frogs}}{\text{logs}} \right) = 12 \left( 0.25t - 13.5 \right) \left( 0.3t - 19 \right) \text{frogs}
\]

\[
\therefore Q(t) = 0.9t^2 - 105.6t + 3078 \text{ frogs based upon the temperature } t \text{ degrees hobbit for } 70 \leq t \leq 90.
\]
9. (10pts) If \( f(x) = \sqrt[3]{5x - 6} \) and \( g(x) = 2x + 9 \), find and simplify \((g \circ f)(x)\).

\[
(g \circ f)(x) = g(f(x)) = \sqrt[3]{5(2x + 9) - 6} = 2\sqrt[3]{5x - 6} + 9
\]

10. The table gives the number of students enrolled in the college of science by the given years. **Remember to give units in your answers!**

<table>
<thead>
<tr>
<th>L1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>5</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>L2</td>
<td>number of students</td>
<td>1236</td>
<td>1274</td>
<td>1312</td>
<td>1350</td>
<td>1432</td>
</tr>
</tbody>
</table>

a. (10pts) Find a model for the \( N \) number of students in the college of science for the number of \( t \) years after 1995.

LinReg L1, L2, Y1

\[ N(t) = 40.35294118t + 1232.77451 \] students in the college of science for \( t \) years after 1995 for \( 0 \leq t \leq 7 \).

b. (5pts) Find and interpret the constant rate of change.

The constant rate of change is 40.35294118, which means that the number of students increased by about 40 students each year since 1995.

c. (5pts) Use the model to estimate the college of science enrollment in 2003.

\[ Y1(8) = 1555.598039 \]

The model predicts about 1555 college of science students in 2003.