Projects for Assessment in Gen. Ed. Math

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In Loving Memory of

Charlotte Sukta
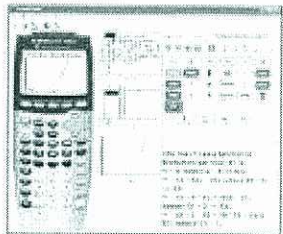**Saint Laurence HS**
Burbank, IL

"One is so much less than two"
John Tukey

Description: Eleven projects, their solutions and corresponding WORD files are provided. The WORD files can be downloaded and assigned to your students. The WORD files can also be modified. Step by step instructions for using the TI 83 / 84 calculator for list management, evaluating formulas, using memory, entering data, finding basic statistics and graphing are included. These projects are used in both my online and traditional classroom Gen Ed Math course.

Online Handouts available at
http://online.morainevalley.edu/websupported/jsukta/handouts/GenEdMathProjects.htm

	List (data) Management	
	Select the TI-83 or the TI-Smartview screen to learn about: • Saving data lists (STAT editor, L1 - L6) to named lists. • Recalling named lists to the STAT editor (L1 - L6). • Transferring lists from your calculator to TI-Smartview.	
WORD 97, .doc files	Select the WORD icon on the left to be taken to the WORD documents (.doc and .docx files) for the projects.	
WORD 07, .docx files"	When you select a document, select "Cancel" if authentication information is requested. The document will then be displayed.	

Rationales and Projects:

1. **Project: Simple and Compound Interest**
   How much money will be in their grandchild's college fund 18 years from now? How much money must newlyweds deposit today to have $10,000 twenty-five years from now?

Rationale Car When the loan officer states that "The simple interest formula is used to calculate the monthly interest", he is telling the truth. However what is being used for the principal? Is it the amount of the loan or the remaining balance?

2. **Project: Car Purchase**

Rationale Home What is my actual payment? What is Escrow? Should I refinance?
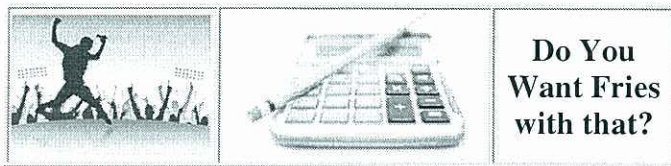
3. **Project: Home Purchase**

4. **Project: Annuities in Real Life**
   How much should I deposit monthly
   A. Starting at birth for my child's college education fund?

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Do You Want Fries with that?

B. Starting on our wedding day for a 25th wedding anniversary cruise?
C. To have enough money to start my own business?
D. To have enough money to retire and not have to work in order to supplement my retirement?

U.S. NATIONAL DEBT CLOCK

The Outstanding Public Debt as of 12 Oct 2009

$11,911,682,662,176.58

The estimated population of the United States is **307,084,684** so each citizen's share of this debt is **$38,789.56**.

5. Project National Debt
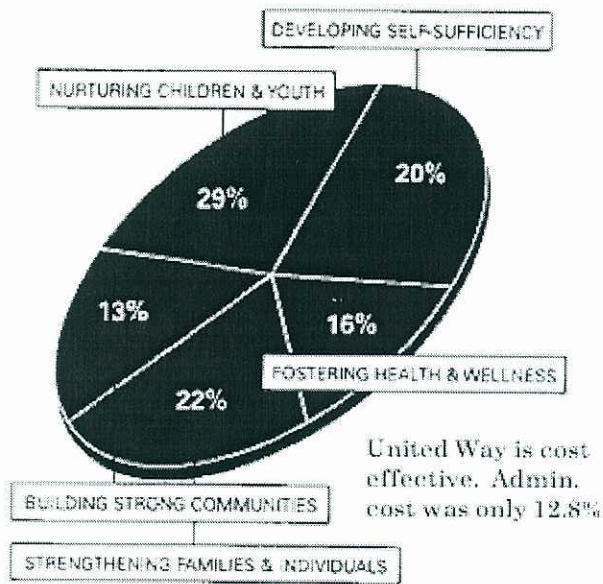How far can a stack of $1 bills equal to the national debt extend? Will it reach the moon?

Click on the National Debt above to view the current debt.

Rationale Home Renovation
Perimeter, area and volume are studied with the purpose of applying these geometric concepts to home improvement (renovation) projects.

6. Project: Home Renovation

DEVELOPING SELF-SUFFICIENCY

NURTURING CHILDREN & YOUTH

29%

20%

13%

16%

22%

FOSTERING HEALTH & WELLNESS

BUILDING STRONG COMMUNITIES

STRENGTHENING FAMILIES & INDIVIDUALS

United Way is cost effective. Admin. cost was only 12.8%

Rationale: Descriptive Statistics.
How difficult is it to construct a pie chart?

7. Project: Qualitative Data

8. Project: Quantitative Data
Use Descriptive Statistics to organize raw data into a table, make graphs, find measures of central tendency, dispersion, and outliers.

WIN A $1 MILLION DREAM HOME, or $1,000,000 in Cash!

National Association of Home Build

Rationale: Probability Distributions.
How can the Las Vegas and riverboat casinos make money on their table games, video poker
games, and slot machines?

9. Project: Raffle
The actual raffle site is:
http://www.houseofdreamscharityraffle.org/In

10. <u>Project: Venn Diagram</u> Calculate the probabilities and odds for a patient experiencing an adverse side effect after taking an experimental allergy medication.

Note: Turn down your speakers. This site has a sound file in the background.

11. <u>Project: Normal Distribution</u>
Calculate probabilities for a given x and determine x for a given probability. Both probability tables and the built in functions of the TI 83/84 series calculator will be used.

If you have further questions, please contact me by e-mail: jsukta@morainevalley.edu

Thank you for your interest.

Charlotte and Joe Sukta