

Calculator Workshops

Friday, October 31, 2003

FRI - W1
AMERICAN
10:00 AM - 11:45 AM

EXPLORING FUNCTIONS, COMPOSITIONS, AND INVERSES ON THE TI-83+

Roseanne Hofmann, *Montgomery County Community College*

The calculator can provide students with important insights as they explore the concepts of functions, composition of functions, and inverse functions. The calculator can be used to visualize the domain and range of the composition of functions. Teaching examples will be demonstrated.

FRI - W2
BRANIFF
10:00 AM - 11:45 AM

USING PROJECTS TO BRING INTRODUCTORY ALGEBRA TO LIFE

Sharon North, *St. Louis Community College*

Participants will work through classroom investigations designed to engage the developmental math student. These projects incorporate the use of real data and TI-83+ graphing calculator technology. The data used in the investigations relate to "central learning themes" which may be used to link developmental reading, writing, and mathematics courses.

FRI - W3
AMERICAN
12:00 PM - 1:45 PM

AN INTRODUCTION TO THE CLASSPAD 300 CALCULATOR

Constance Edwards, *Coastal Carolina University*

The ClassPad 300 is a touch screen calculator endowed with applications that let you graph 2D and 3D functions, perform statistical data analysis, investigate geometric properties, create interactive lessons for students, and much, much more. Calculators will be available for participants to use during the workshop.

FRI - W4
BRANIFF
12:00 PM - 1:45 PM

USING THE VOYAGE 200 TO TEACH STATISTICS

Joseph Fiedler, Roger Peck, *California State University - Bakersfield*

The statistics capabilities of the Voyage 200 Stat/List editor will be demonstrated. The workshop will focus on graphing, regression, and residuals.

FRI - W5
AMERICAN
2:00 PM - 3:45 PM

PRECALCULUS TOPICS ENHANCED WITH TI-83+ APPS

Charles Hofmann, *La Salle University*

The "Ineqalz" and "Transfrm" Applications on the TI-83 Silver calculator enhance the teaching and exploration of inequalities, families of functions, transformations and curve fitting. Classroom "examples" and worksheets will be shared.

FRI - W6
BRANIFF
2:00 PM - 3:45 PM

MODELING BEFORE CALCULUS

Benny Evans, Bruce Crauder, Alan Noell, *Oklahoma State University*

A hands-on workshop displaying a successful implementation of modeling in college algebra and precalculus.

FRI - W7
AMERICAN
4:00 PM - 5:45 PM

A VOYAGE THROUGH PRECALCULUS

Jean Horn, *Northern Virginia Community College - Woodbridge*
Toni Robertson

This hands-on workshop will explore various ways the Voyage 200 can be used to enhance precalculus through the use of scripts, worksheets, and Cabri geometry.

FRI - W8
BRANIFF
4:00 PM - 5:45 PM

DISCOVERY ACTIVITIES USING THE CBL2 AND CBR

David Ray, Brenda Lackey, Judith Gathers *University of Tennessee Martin*

Participants will be divided into groups to work with the CBL temperature probe, the CBL microphone, and the CBR. Groups will rotate so that all participants will have experience with all three data collection devices.

Saturday, November 1, 2003

SAT - W9
AMERICAN
8:00 AM - 9:45 AM

STATISTICS PROJECTS AND TECHNOLOGY

Mario Triola, *Dutchess Community College*

Projects and activities in an introductory statistics course can make that course more effective, more lively, more interesting and more relevant. Specific examples will be given, and participants will be actively involved.

Calculator Workshops

Saturday, November 1, 2003

SAT - W10
BRANIFF
8:00 AM - 9:45 AM

AN INTERACTIVE APPROACH TO ALGEBRA USING TI-83+ APP'S

Patsy Fagan, *Drake University*

Explore some activities that take algebra from a set of 'memorization' tasks to active, conceptually-based explorations using some of the newest and exciting App's: Transformation Graphing, Inequality Graphing, Cell sheet and more.

SAT - W11
AMERICAN
10:00 AM - 11:45 AM

MATHEMATICAL MODELING, DISCRETE DYNAMICAL SYSTEMS, CHAOS, AND THE TI-83 + TECHNOLOGY

William Fox, Richard West, *Francis Marion University*

Models with DDS will be illustrated with prescribed drug dosages, population growth, and competitive hunter models with systems of DDS. After each model is built, the long term behavior will be shown numerically and graphically with the TI-83 +.

SAT - W12
BRANIFF
10:00 AM - 11:45 AM

JAZZ UP YOUR MATH - NCTM STYLE

Carol Gudorf, *Edison Community College*

Participants will be actively engaged, sharing, assessing, building, and using technology to hear, see, feel, and experience how the NCTM Standards can be used as the criteria to effectively evaluate their math program and serve as a guide to make program improvements. This includes changes in course materials, structure, and/or technology.

SAT - W14
BRANIFF
12:00 PM - 1:45 PM

USING THE APPS ON THE TI-73 IN MIDDLE SCHOOL CONTENT COURSES

Bill Whitmire, *Francis Marion University*

Participants will use the TI-73 to download and explore some of the applications that are available for use in a middle school classroom. Concepts of probability, geometry, and number will be covered in this workshop.

SAT - W15
AMERICAN
2:00 PM - 3:45 PM

THE SYMBOLIC MATH GUIDE IN CALCULUS AND PRECALCULUS

J. Douglas Child, *Rollins College*

The Symbolic Math Guide for TI-89 and Voyage 200 calculators was designed to help students learn to perform symbolic calculations. This workshop will consider topics like integration by parts, the chain rule, and fuzzy quotient things using this new software.

SAT - W16
BRANIFF
2:00 PM - 3:45 PM

UNDERSTANDING DEVELOPMENTAL ALGEBRA USING CALCULATOR PITFALLS

Joanne Thomasson, *Pellissippi State Technical Community College*

Developmental algebra students often encounter calculator results that do not coincide with their paper and pencil results. The presenter will discuss these calculator results and how to use these results to better understand the algebra concepts being taught. Participants will be asked to share other pitfalls they have encountered.

SAT - W17
AMERICAN
4:00 PM - 5:45 PM

NEW KINDS OF WHOLE CLASS ACTIVITIES IN ALGEBRA AND PRECALCULUS USING TI-NAVIGATOR

Stephen Hegedus, *University of Massachusetts - Dartmouth*

Students create their own position and velocity vs. time functions in MathWorlds on the TI-83+ that vary in a systematic way. Teachers upload their work to a computer and display on the same axis. Class explorations regarding parallelism, intersections, parameters, rate and relating motions to graphs and formulas can occur.

SAT - W18
BRANIFF
4:00 PM - 5:45 PM

MATHEMATICIANS NEED PDA'S TOO!

Elias Freedman, *Infinity Softworks*

Is a PDA (Personal Digital Assistant) really for you? Here is your chance to find out! Learn about PDA's and explore the new graphing calculator software, powerOne Graph, designed to bring advanced math, color graphing, calculus, and more to your handheld device. It might just replace your TI-83+, or HP48!