

## Exploring Common Core Topics in High School Mathematics with the TI-84 Plus Family

Available in 1-, 2- and 3-day configurations

Content Knowledge

**Audience:** Educators who need support in transitioning to CCSS for high school mathematics.

**Technology:** TI-84 Plus or TI-84 Plus C Silver Edition graphing calculator; TI-SmartView™ software.

Overview: This workshop addresses content standards in high school mathematics, with a focus on

building pedagogical skills for leading discussions, asking students to explain their reasoning and engaging them in the Mathematical Practices with the TI-84 Plus family.

**Workshop Objectives:** 

Identification of main support needs with coverage of key CCSS domains in Algebra,

1-day Geometry, and Statistics; introduction to the Common Core Mathematical Practices;

overview of essential TI-84 Plus technology skills, including MathPrint™ functionality.

2-day Introduction to apps designed to explore multiple representations, identify and build functions, and enhance students' understanding of transformational geometry; deeper discussions of the role of technology in engaging students in the Mathematical Practices.

Broader subject coverage with multiple opportunities for differentiation based on teacher 3-day needs; additional Statistics coverage, including features for graphing and analyzing univariate and bivariate data; addresses the subjects and units indicated below.

Algebra 1: Linear Functions, Linear Systems,

Functions & Relations, Quadratic Functions, Exponential Functions

**Geometry:** Similarity & Proportion, Circles,

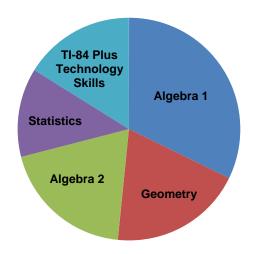
Quadrilaterals & Polygons, Transformational Geometry

Algebra 2: Functions, Matrices, Radical Functions,

Probability, Rational Functions

**Statistics:** Displaying & Describing Univariate

Data, Describing Bivariate Data



Sample Lesson: Pass the Ball

**Objective**: Collect data about how long it takes various-sized groups to perform a task.

Develop a mathematical model of the data and use it to make predictions.

Content Standards: HSF-BF.1a, HSF-BF.5, HSA-CED.2

Mathematical Construct viable arguments and critique the reasoning of others; model with

**Practices:** mathematics; use appropriate tools strategically.