Fact Finding with the TI-84 CE

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Agenda

- Welcome and Introductions
- Strategies for Self-Checking
- Strategies with Multiple Representations
- Calculator Tips
- Webinar Drawing

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Expected Outcomes

I CAN empower students to use the TI-84 Plus CE calculator to verify conjectures.

I CAN apply TI-84 Plus CE APPs to explore and solve problems.

I CAN identify ways to utilize the TI-84 Plus CE calculator to show multiple representations of a concept.

Tools on the TI-84 CE

- **Test menu**
- **Piecewise** graphs
- **Transform** app
- **Inequalz** app
- **Sto** for precision & self check
- **Calc** (2nd TRACE -- min, max, zero)
- **Table** and **Tblset**
- **Modes**

Self Checking

- Birthday Fractions (MM/DD)
  - Fraction Templates/Test Menu
  - Rational or Irrational
  - Fraction to Decimal

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Self Checking (Review Skills)

A. $x^2 - 2x - 3$

$2x^2 - 17x + 30$

B. $\dfrac{x+1}{3} + \dfrac{x}{2}$

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Linear Functions

- Birthday Triangle (MM,DD)
- Piecewise & Line Options

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Quadratic Functions

- Transform App
- Intercepts
- Increasing and decreasing
- Positive and negative

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Complex Numbers

- Mode
- Definition & Operations
- Checking Solutions

$$x^2 + 2x + 2 = 0$$

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Polynomial Functions

- Intercepts
- Increasing and Decreasing
- Positive and Negative
- **End Behavior**

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Explore this one!

$$f(x) = -2x^3 + 6x^2 + 26x - 30$$

window
and
zoom options
and
Tblset ask

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Rational Functions

- Domain
- Intercepts
- End behavior
- Increasing and decreasing
- Asymptotes (Horizontal, Vertical, Oblique/Slant)

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$$h(x) = \frac{5(x-1)^2}{(x-2)(x+3)}$$

Inequalz App

Vertical Asymptotes

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What is one skill you learned today that you will take back to your classroom soon?

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