



TI-84 Plus Family Scavenger Hunt



Find someone who can show you how to do one of the skills in the boxes. Introduce yourself, (if you don't know them already!) and have them demonstrate the skill to you and then sign the box where the skill is listed. Try to get as many signatures as possible.

0. Evaluate $\frac{10}{37} + \frac{4}{51}$

- a. Give the decimal approximation.
- b. Give the fraction.

1. Find the greatest common divisor of 2100, and 2205.

2. Evaluate the repeated fraction:

$$2 + \frac{1}{2 + \frac{1}{2 + \frac{1}{2}}}$$

3. Calculate 10!

Hint: [Math] might be useful

4. Solve to find the roots of $x^2 - 5x + 6 = 0$

5. Show that (2,3) is a solution to the following system without actually solving it.

$$\begin{aligned} x - 3y &= -7 \\ 2x + y &= 7 \end{aligned}$$

6a. Graph $f(x) = 150000 - x^2$.

6b. Change to a better Window in two different ways

7a. Graph the function $f(x) = 3x^2 - 5$.

7b. Use the trace feature to find several points on the graph.

8. Graph an equation that crosses the x-axis 2 or 3 times.

9. Changing only the parenthesis, make the following evaluate to -17. Verify with your calculator.

$$(3+5)*2-15*(8-4)$$

10. Solve the following system in two different ways.
 $2x + 7y = 5$
 $x + 3y = 3$.

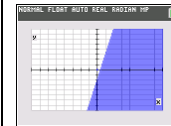
11. Graph $y = \frac{30}{x}$
 Switch to the table view.
 Use the table to find 3 points on the graph.

12. Evaluate $\sqrt[3]{75}$

13. Evaluate $3^{5/2}$

14. Graph $y = |x - 2|$

15. Create a graph similar to:



Hint: [Math] will be involved

16. Create a program (TI-Basic or *Python) that prints "Hello World" on the screen.

**Only available on TI-84 Plus CE Python*

17. Five pumpkins weigh 1, 1.5, 2, 2.7, and 3 lbs. What is the average weight?

18. Graph $y = 3x^2$.
 Show/Explain the difference between [zoom] standard and [zoom] fit.



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TEACHER TIP SHEET

This activity is great for early in the year, and can be an ice-breaker in a new classroom, where all students may not know each other. The format can be modified and could be 2-3 students working together, or even as a solo assignment, if some students are virtual. Virtual students could also volunteer to teach a skill to the class.

0. Evaluate $\frac{10}{37} + \frac{4}{51}$

- a. Give decimal approximation.
- b. Give the fraction.

[math] > ► Fraction
or [alpha] [y=]

1. Find the greatest common divisor of 2100, and 2205.

[math] > Num > gcd(

2. Evaluate the repeated fraction: $2 + \frac{1}{2 + \frac{1}{2 + \frac{1}{2}}}$

alpha X,T,θ,n yields a fraction use repeatedly

3. Calculate 10!

[math] > Prob > !
or [alpha][window][9]

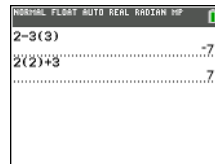
4a. Solve to find the roots of roots of $x^2 - 5x + 6 = 0$

Answer may vary.
Graph find x-intercepts
Graph look at a table
Guess and check using calculations

5. Show that (2,3) is a solution to the following system without actually solving it.

$$x - 3y = -7$$
$$2x + y = 7$$

substitution



6a. Graph $f(x) = 150000 - x^2$

6b. Change to a better Window in two different ways

[zoom] fit
or
[window] change constraints

7a. Graph the function $f(x) = 3x^2 - 5$.

7b. Use the trace feature to find several points on the graph.

8. Graph an equation that crosses the x-axis 2 or 3 times.

9. Changing only the parenthesis, make the following evaluate to -17. Verify with your calculator. $(3+5)*2-15*(8-4)$

$3+(5*2-15)*(8-4)$

10. Solve the following system in two different ways.

$$2x + 7y = 5$$
$$x + 3y = 3.$$

11. Graph $y = \frac{30}{x}$

Switch to the table view.
Use the table to find 3 points on the graph.

[alpha] [graph]
[alpha][window] useful too

12. Evaluate $\sqrt[3]{75}$

[math]
Or
[alpha][window]

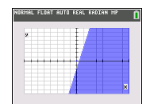
13. Evaluate $3^{5/2}$

^ for exponent

14. Graph $y = |x - 2|$

|| is abs() [math] > Num
Or [alpha][window]

15. Create a graph similar to:



Arrow over , press enter

Y1: 5X-3
Color: BLUE
Line:
OK CLEAR

Y1: 5X-3

16. Create a program (TI-Basic or *Python) that prints "Hello World" on the screen.

*Only available on TI-84 Plus CE Python

17. Five pumpkins weigh 1, 1.5, 2, 2.7, and 3 lbs. What is the average weight?

18. Graph $y = 3x^2$. Show/Explain the difference between [zoom] standard and [zoom] fit.