NumWorks Scavenger Hunt

Teacher Tips:

- The slides below are in order
- Place them at random around the room including the *Calculator Hints if desired*
  - Hint Ideas:
    - Place multiple copies of the Calculator Hints around the room so students can find them
    - Cut out the individual Calculator Hints and place them around the room too
    - Teacher holds on to the Calculator hints and students come ask for them
    - Make a student a “calculator expert” and give them the hints to be a resource for their peers
- Students can start at any problem and its answer will tell them which problem to go to next
- Students will be asked to record the shape and answer of each problem on their answer sheet

NumWorks Scavenger Hunt

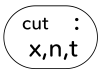
Student Instructions

- With a partner, start at one of the cards around the room
- Draw the shape on the left side of the card on your answer sheet
- Solve the problem and record your answers on the answer sheet beside the shape for that problem
- Find your next problem by looking for the answer to your previous problem in **decimal form** around the room
- There are *Calculator Hints* as well if you get stuck

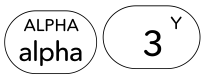
NumWorks Calculator Hints

δ

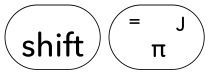
Use the Empty template or type directly



for x



for y



for =

Graph tab: navigate to y-intercept

σ

After hitting exe to find the answer
Use the **up arrow** to see the '…'
The '…' will show additional results

φ

To find the linear regression equation,

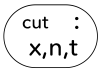
Graph tab → 

Choose Linear model (mx+b)

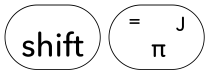
Use the down arrow
to navigate to the line
Or press your Toolbox button again

π

Use the Empty template or type directly



for x



for =

λ

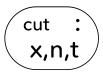
Use your Toolbox button

Go down to the **Arithmetic** menu
and hit EXE

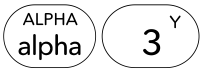
Look for **gcd(p,q)**

α

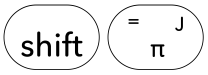
Type directly, use the Empty template or edit a template



for x



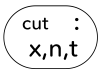
for y



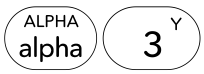
for =

ρ

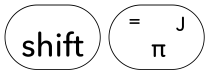
Use the y=x template or type directly



for x



for y



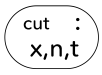
for =

Graph tab: → 

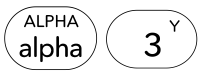
Change y-value

Σ

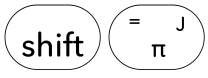
Use the Empty template or type directly



for x



for y



for =

Graph tab: → 

Change x-value

Table tab: Change any x-value
in the table to -3

Name:_____ Date:_____

NumWorks Scavenger Hunt

Instructions:

1) Start at one of the cards around the room.
2) Record the shape on the card in the table below.
3) Using your NumWorks Calculator, solve the math problem. If you get stuck, look for the Calculator Hints.
4) Record your answer in the table below and use your answer to find the next problem/shape.
5) When you are finished, you should have done all of the problems and made your way back to your starting shape!

Shape	Answer

Answer to Previous Problem

Shape
Φ

New Problem

Use your Calculation app to find $\frac{4\pi^2}{100}$

Write the simplified fraction and decimal rounded to two places.

Answer to Previous Problem

0.39

Shape
TT

New Problem

Use your Equations app to solve the **equation** $5x+6(x-4)=9x-7$

Solve the equation, write the solution as both a fraction and decimal.

Answer to Previous Problem

8.5

Shape
Δ

New Problem

Use your Calculation app to evaluate $\sqrt{50}$

Write the simplified radical and decimal rounded to two places.

Answer to Previous Problem

7.07

Shape
λ

New Problem

Use your Calculation app to find the greatest common divisor of 9, 15, 33.

Write the greatest common divisor.

Answer to Previous Problem

Shape
Ψ

New Problem

Use your Statistics app to input the table

Value V1	Frequency N1
3	1
5	1
6	1
2	2
1	5
4	1

Use your Stats tab to find the sample mean.

Answer to Previous Problem

2.45

Shape
ρ

New Problem

Use your Grapher app to look at the graph of `y=5x+20`

Use the Toolbox key to find the x-value when y = -4.

Answer to Previous Problem

-4.8

Shape
β

New Problem

Use your Statistics app to input the table

Value V1	Frequency N1
2	1
1	1
5	1
6	1
10	1
11	1
7	1

Go to the **Graph Tab**

Select the **Boxplot** and navigate through the boxplot to find the median of the data.

Answer to Previous Problem

Shape
α

New Problem

Use your Equations app to solve the system of **equations**

$$\begin{cases} y=3x+2 \\ 3x+y=-5 \end{cases}$$

Write down the solution to the system in fraction and decimal form rounded to two decimal places.

To find the next problem look for the y-value in decimal form.

Answer to Previous Problem

-1.5

Shape
Σ

New Problem

Use your Grapher app to graph $y=4-x^2$

Using the **Graph** or **Table tab**, find the y-value when x = -3.

Answer to Previous Problem

-5

Shape
σ

New Problem

Use your Calculation app to add $\frac{1}{4}+\frac{8}{5}$

Write the sum as an improper fraction and decimal.

Bonus if you can find the mixed fraction form of the answer as well.

Answer to Previous Problem

1.85

Shape
φ

New Problem

Use your Regression app to input the table

X1	Y1
-5	35
-2	26
1	17
3	11
6	2

On the **Graph tab**, use the Toolbox to create a linear regression.

What is the slope of the linear equation?

Answer to Previous Problem

-3

Shape
δ

New Problem

Use your Grapher app to graph `5x+2y=10`

Write down the y-intercept of the graph.