Happy Pi Day – teacher notes

Let's celebrate Pi Day with interesting observations of collected data.
In this activity, students will:

» Collect and enter data into their calculator

» Graph data and observe the slope relationship of the data

Two activities to choose from. Pick your classroom time needs.

Ready-made Pi Activity

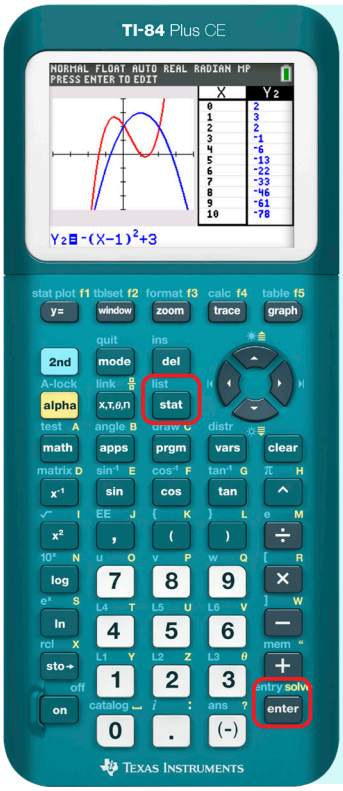
If class time is short, use this activity with provided data and pie visuals. Students can enter the provided data into their tables. Great for individual or small group work.

Homemade Pi Activity

If time permits, ask students to bring something circular from home or find in class. Have students collect data then make a scatter plot. You will need flexible tape measures. Great for class wide or large group work. Also an opportunity to bring in sweet treats for some extra fun!

Share the keypress quick tips page with students for either activity.
Consider a quick review of these steps with students to start the lesson.

Calculator Keypress Quick Tips



1. Enter your collected data

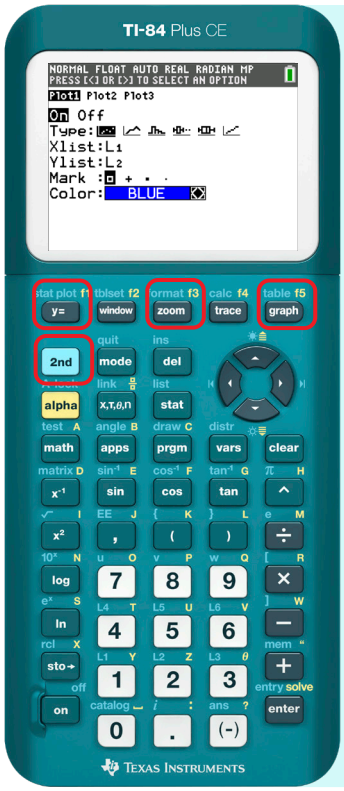
list
stat

entry solve
enter

Input data

L1= Diameter

L2= Circumference



2. Gragh a scatterplot

2nd

stat plot f1
y=

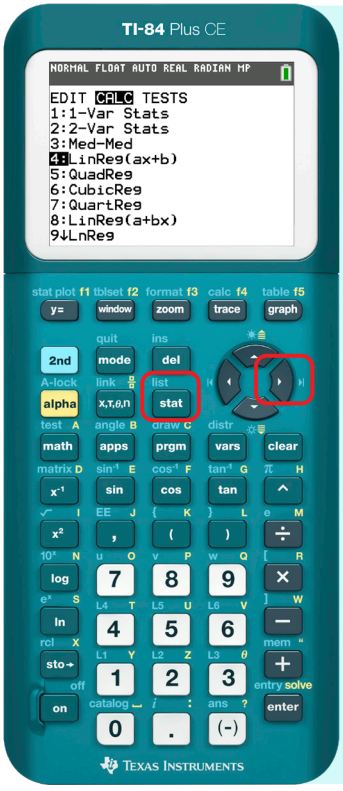
Turn on Stat Plot 1

table f5
graph

Zoom in on graph

format f3
zoom

Select:9: ZoomStat

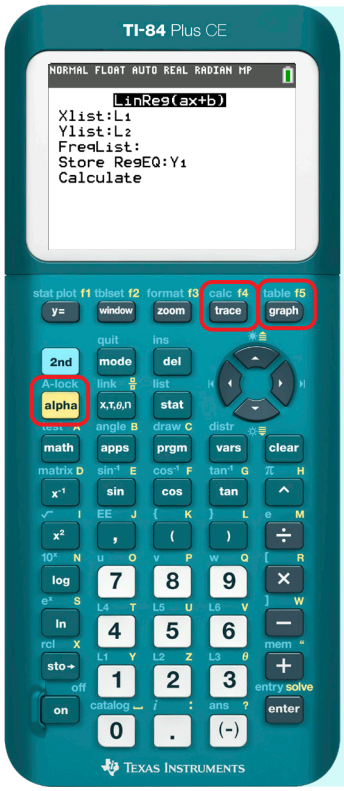


3. Apply linear regression

list
stat

Select: CALC

Select: 4: LinReg(x+b)



4. Graph the line of best fit

Select: Store RegEq

A-lock
alpha

calc f4
trace

Select: 1: Y1

Select: Calculate

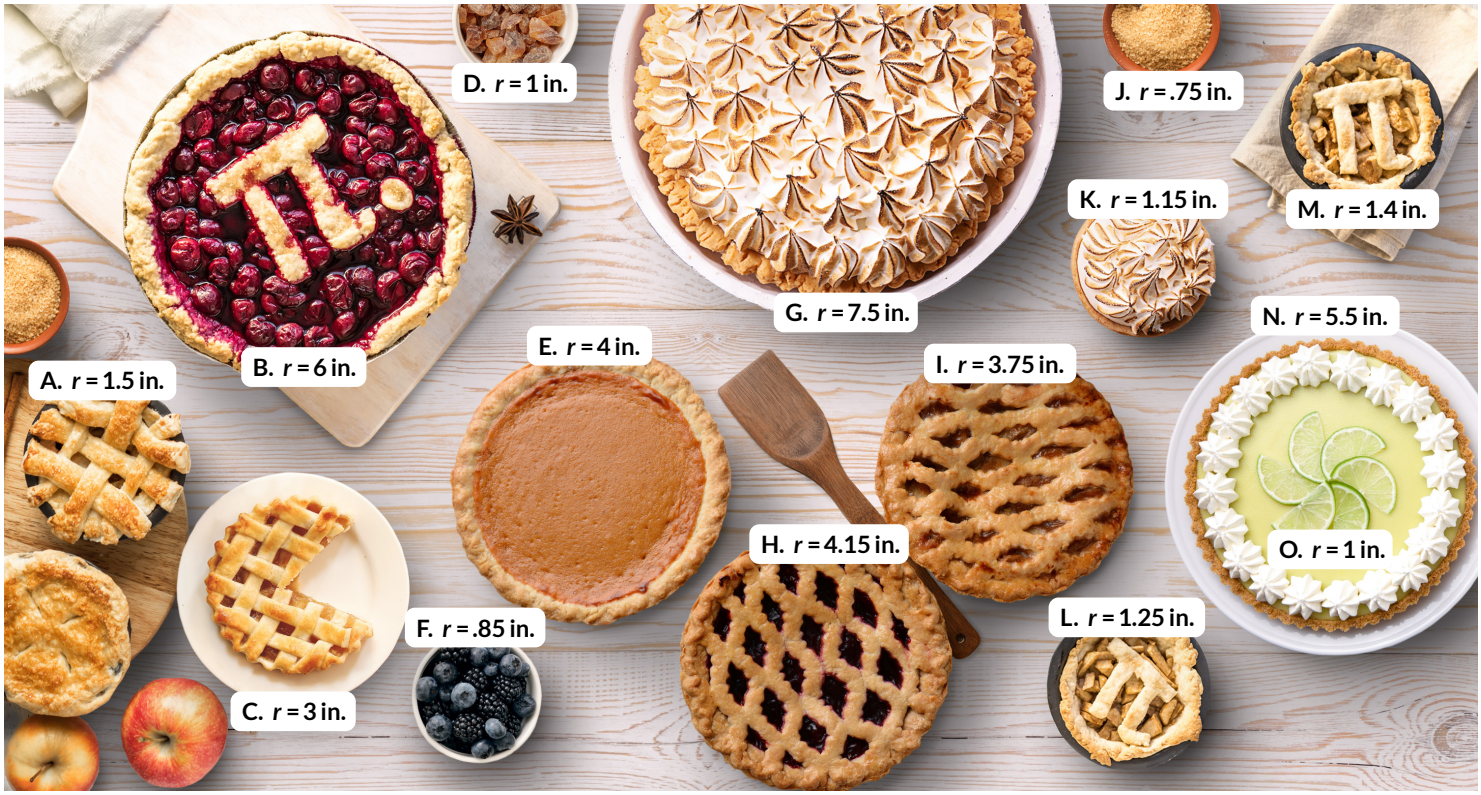
table f5
graph

Q: What do we notice about the slope?

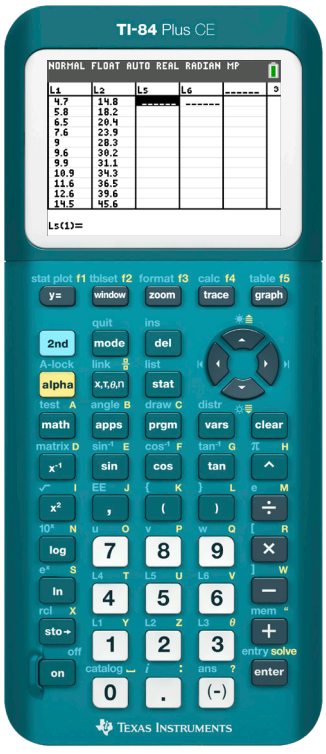
Name: _____ Date: _____

Ready-made Pi

Look at this yummy collection of pies! Let's make a scatterplot of circumference vs. diameter (D, C). Note: only the radius has been provided. What data formats do you need to find first? Next, create a scatterplot and find the best fit line. What do you notice about the slope?



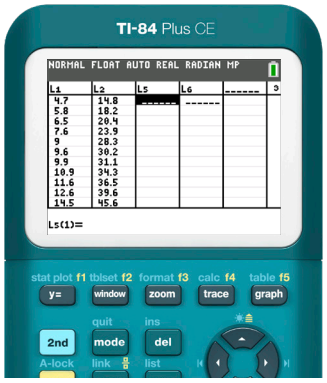
Track your data here



Object	L1 = Diameter	L1 = Circumference
A		
B		
C		
D		
E		
F		
G		
H		
I		
J		
K		
L		
M		
N		
O		

Name: _____ Date: _____

Homemade Pi



Gather your circular items together. Use a tape measure to determine the circumference and diameter of each object. Track your data in the chart below as you go along. When done, enter your data into your calculator. Make a scatterplot of circumference vs. diameter (D, C) then find the best fit line. Graph and observe.

What do you notice about the slope?

Track your data here

Object	L1 = Diameter	L1 = Circumference