



The Lesson is in Their Hands

Mathsfest Conference

Saturday 20th October 2012

Nevil Hopley

Head of Mathematics

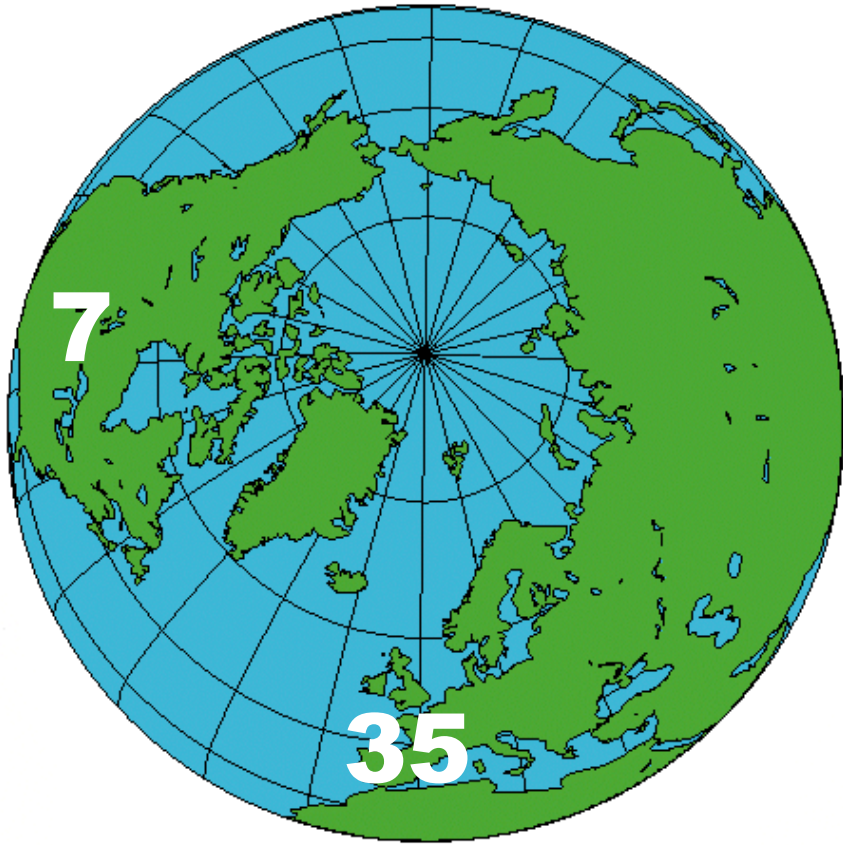
George Watson's College

(11-18 yrs Secondary School)

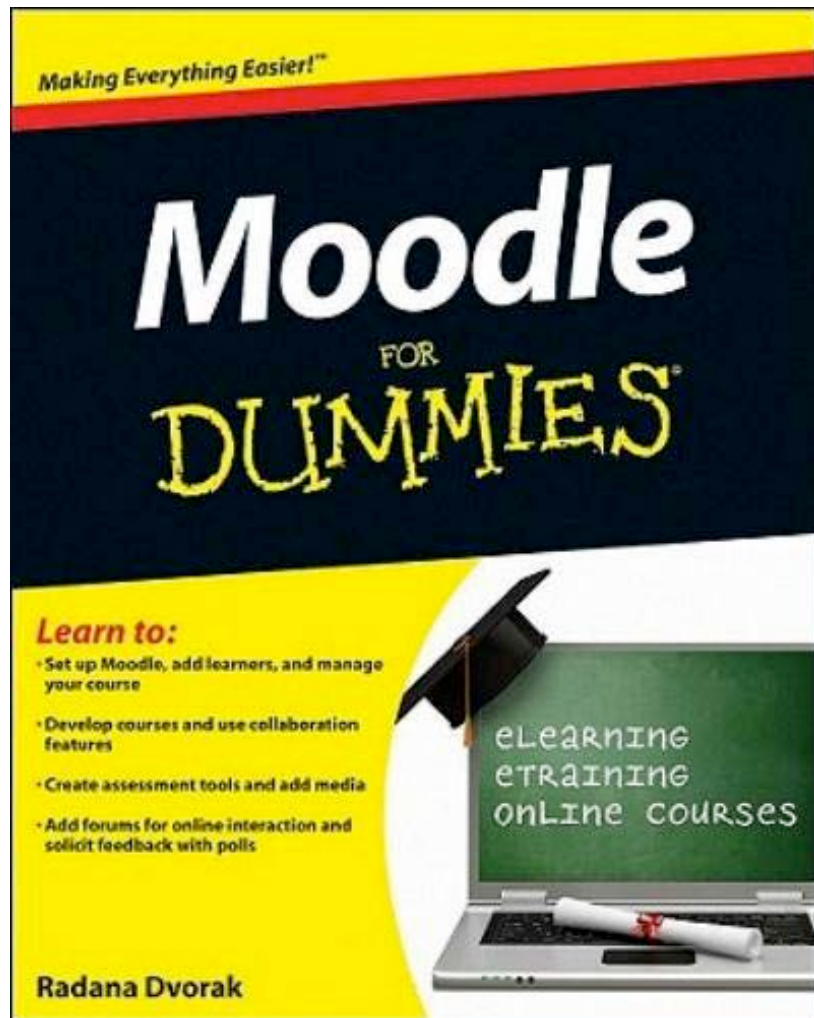
Edinburgh

Scotland

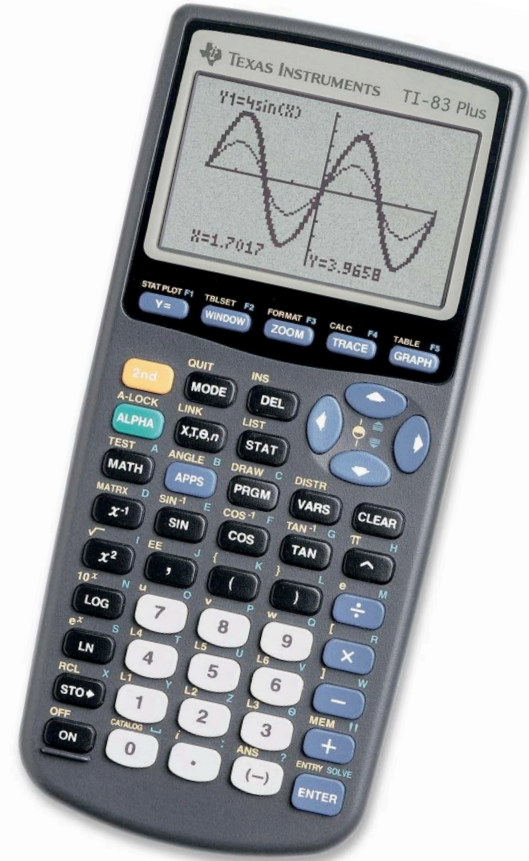
www.calculatorsoftware.co.uk/mathsfest

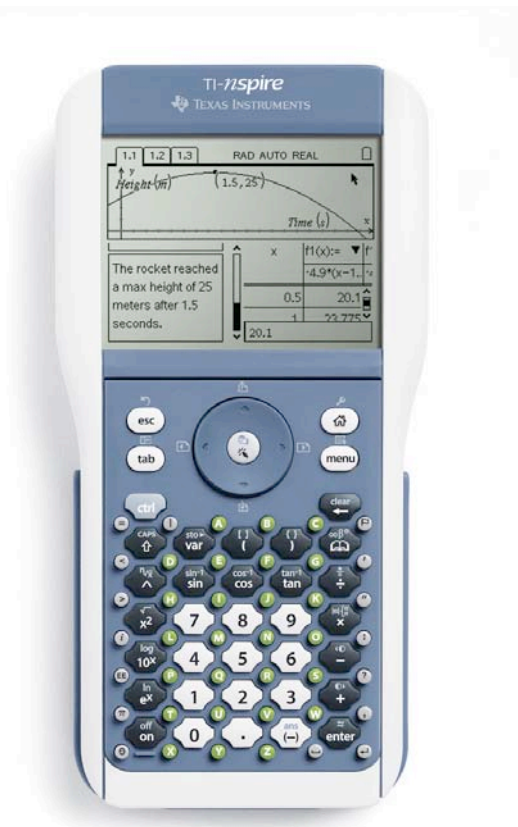


Generation Z (born 1995–2012)



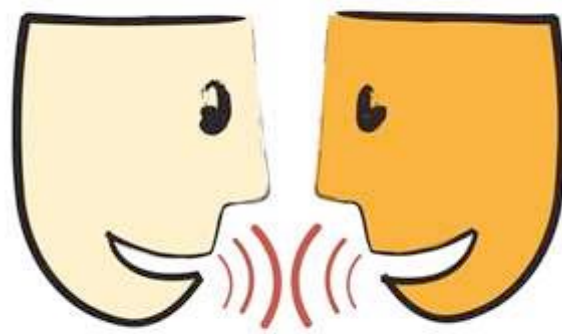
... The learners of this generation are impatient, seem to expect immediate results, and multitask with tech devices at exceptional speeds. They don't like to read instructions — most jump in and get on with it. Their expectations of technology are demanding. This generation will take to eLearning and will push boundaries.



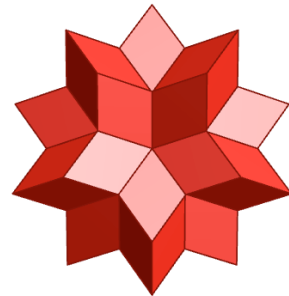
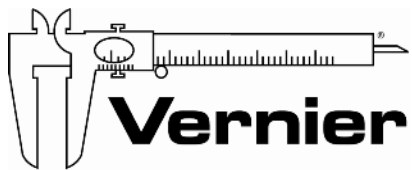
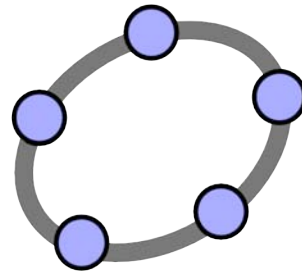
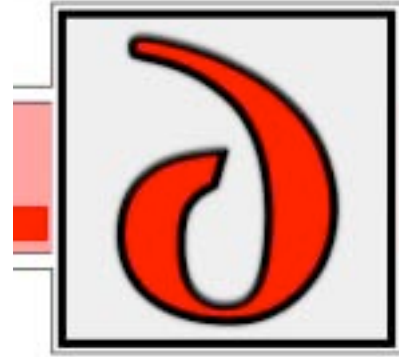
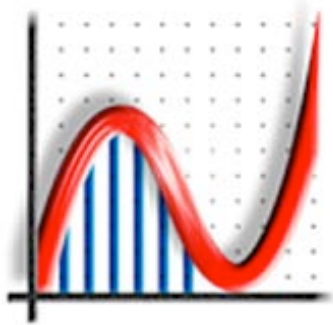


DOB: 7 May 2007







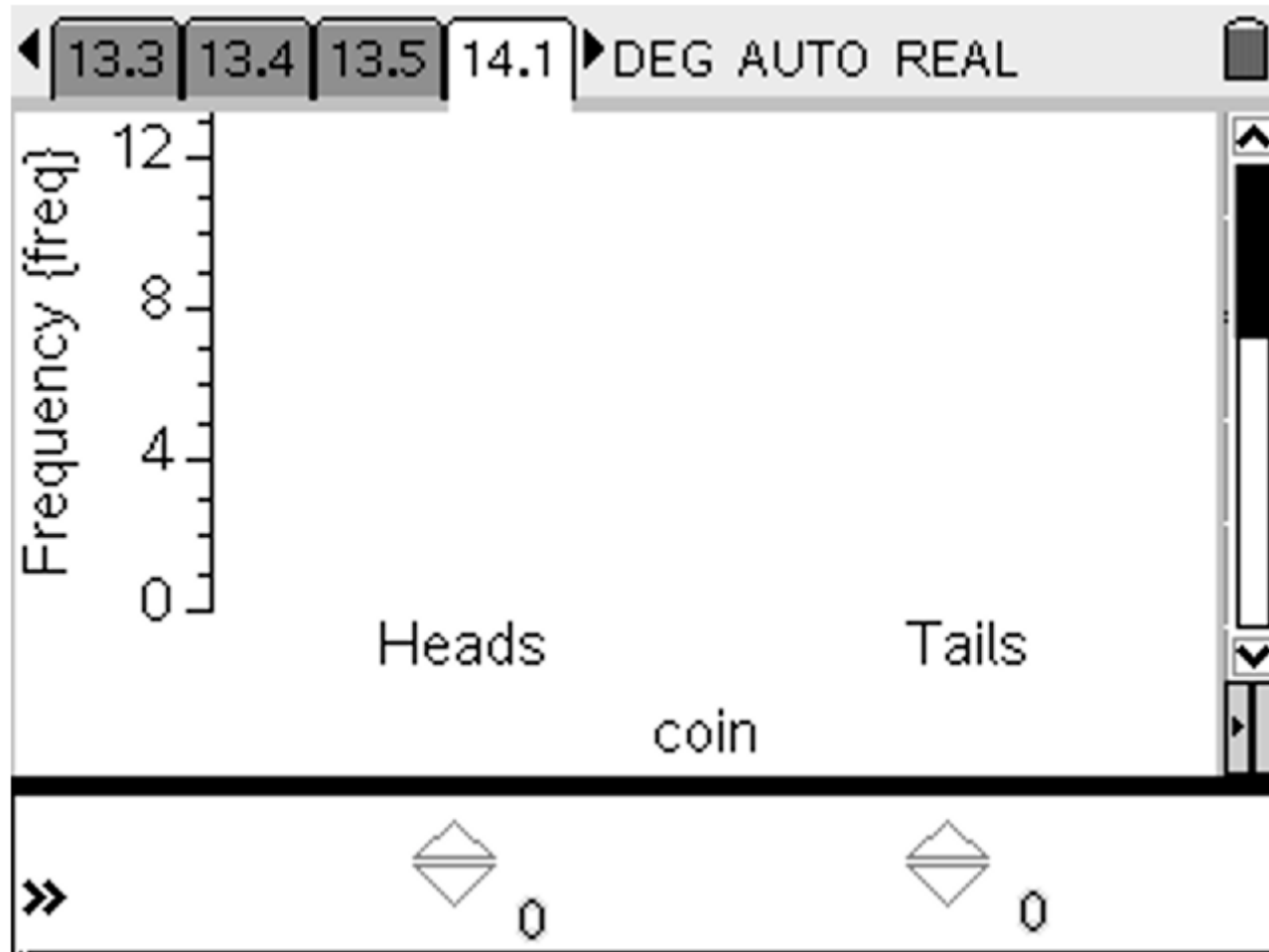


 TI-*nspire*[™] navigator[™]

Teacher Software



Participatory Simulations



**Toss one Coin several times.
Tally the results.**

Screen Capture

File Edit View Help

Make Presenter Show Student Names

View

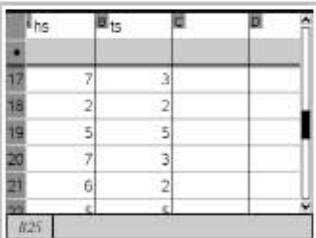
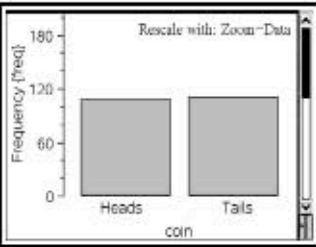
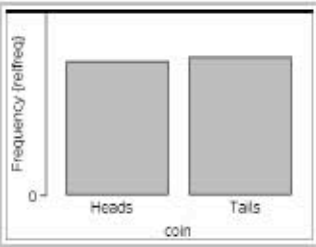
Frame1 Add to Stack Remove from Stack

Auto-Refresh: Off



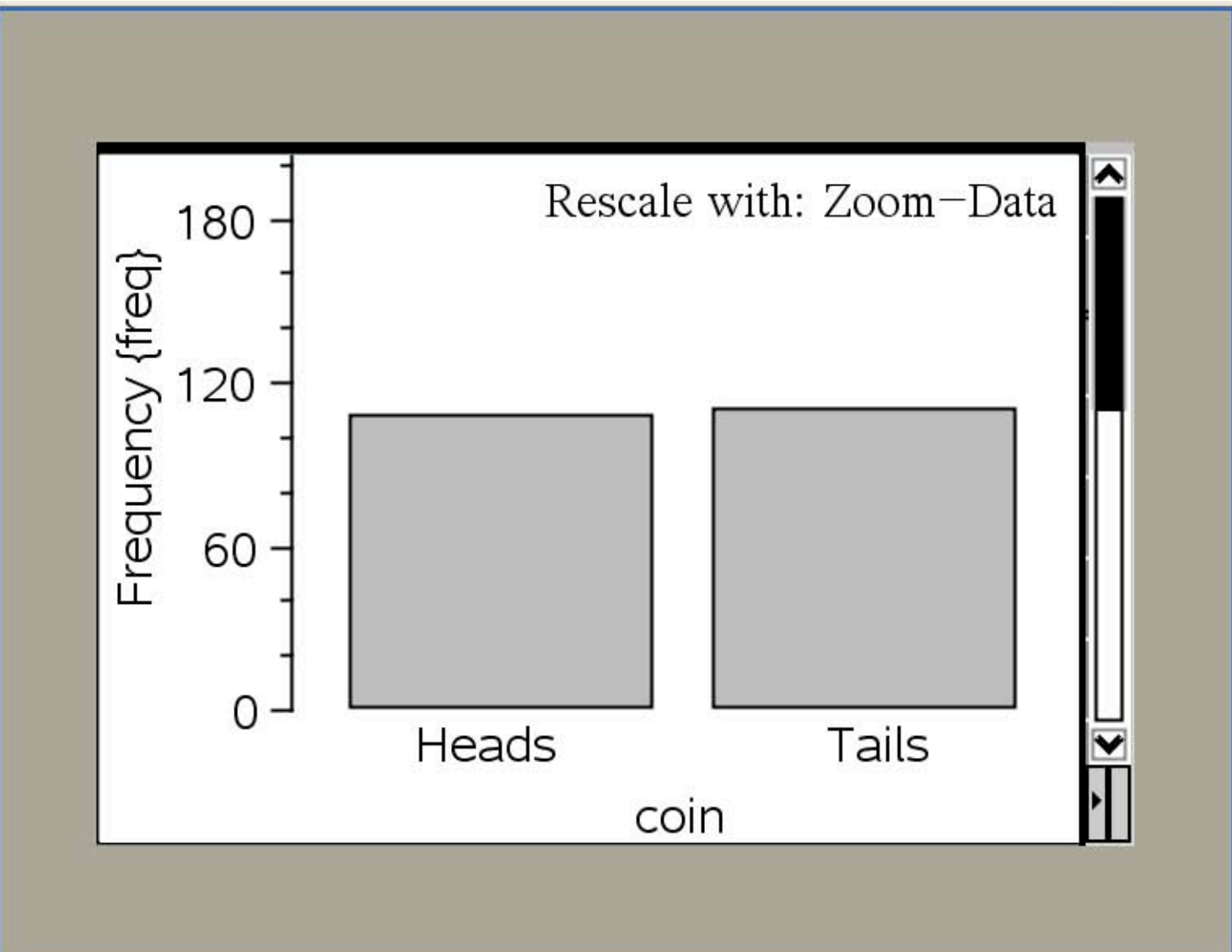
Navigation icons: Home, Save, Print, Undo, Redo, Cut, Copy, Paste, Page Layout, Insert, Calculator, Variable, Text, Table, Scatter Plot, Histogram, Pie Chart, List, and navigation arrows.

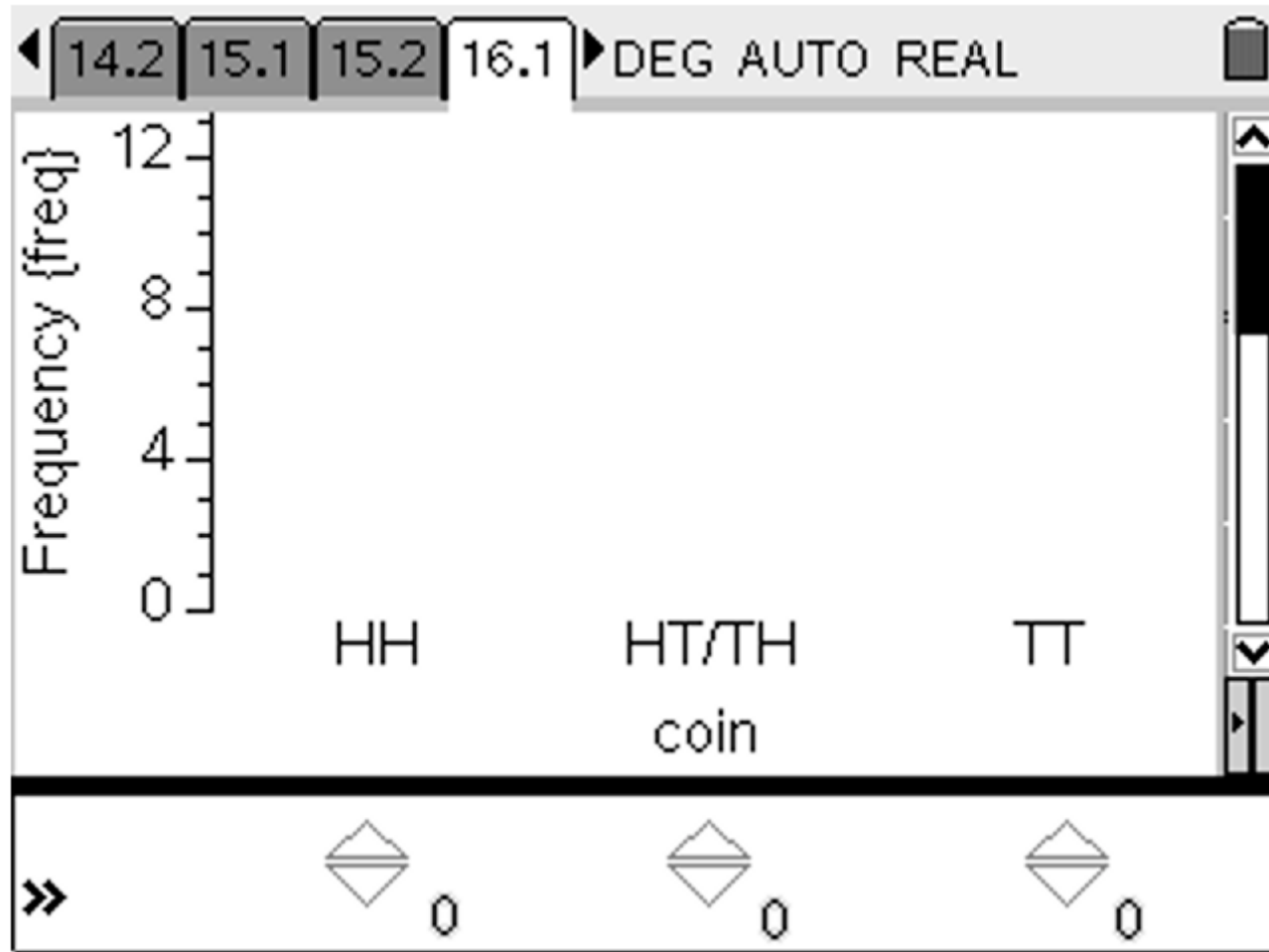
▼ Problem 1

- 
- 
- 

► Problem 2
► Problem 3

Navigation icons: Home, List, Pointer, Zoom, Hand, and Help.





**Toss two Coins several times.
Tally the results.**

Screen Capture



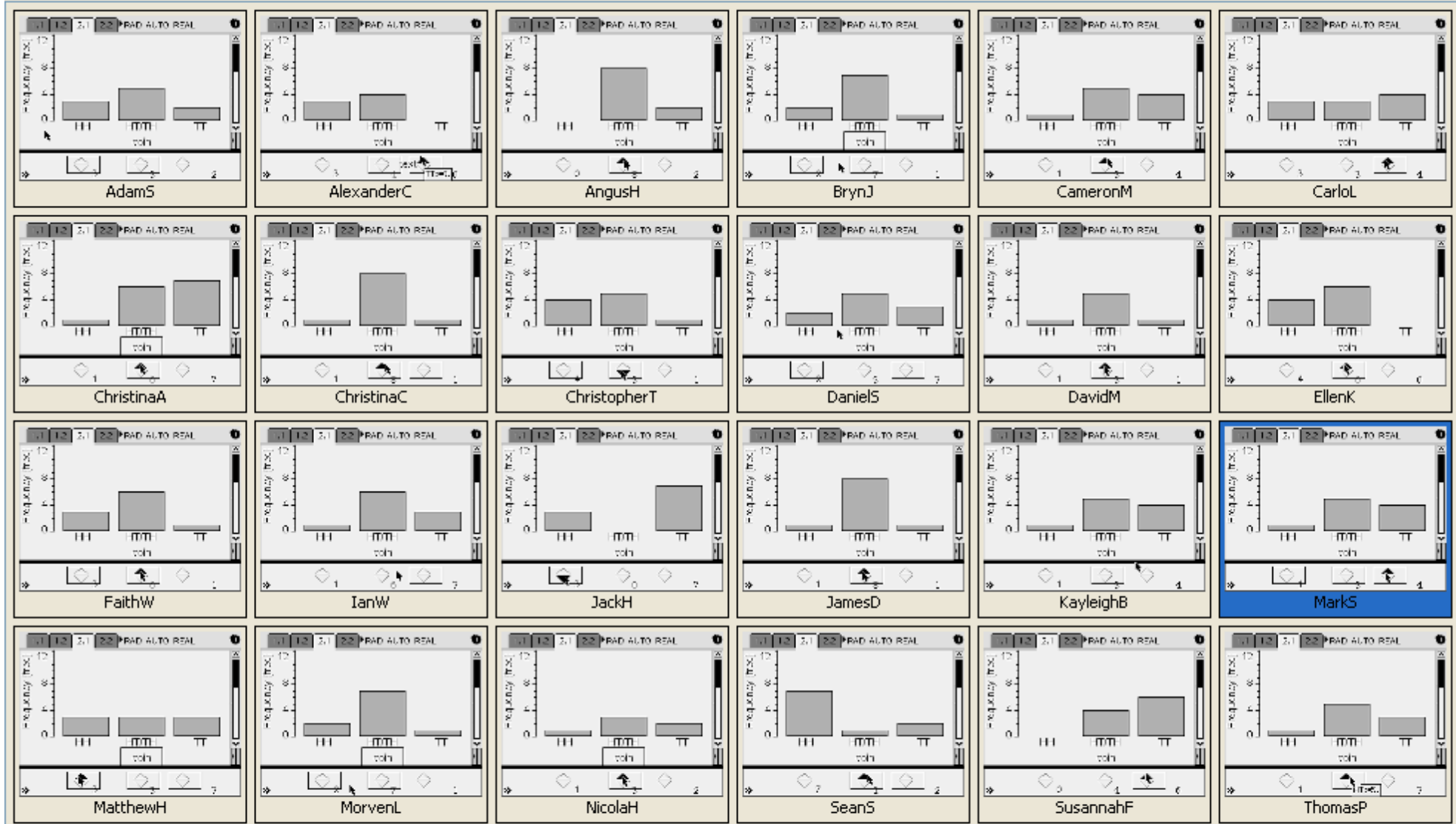
File Edit View Help

Make Presenter Show Student Names

View

Frame2 Add to Stack Remove from Stack

Auto-Refresh: 30 seconds



1

16	2	2	
17	5	5	
18	7	3	
19	6	2	
20	4	4	

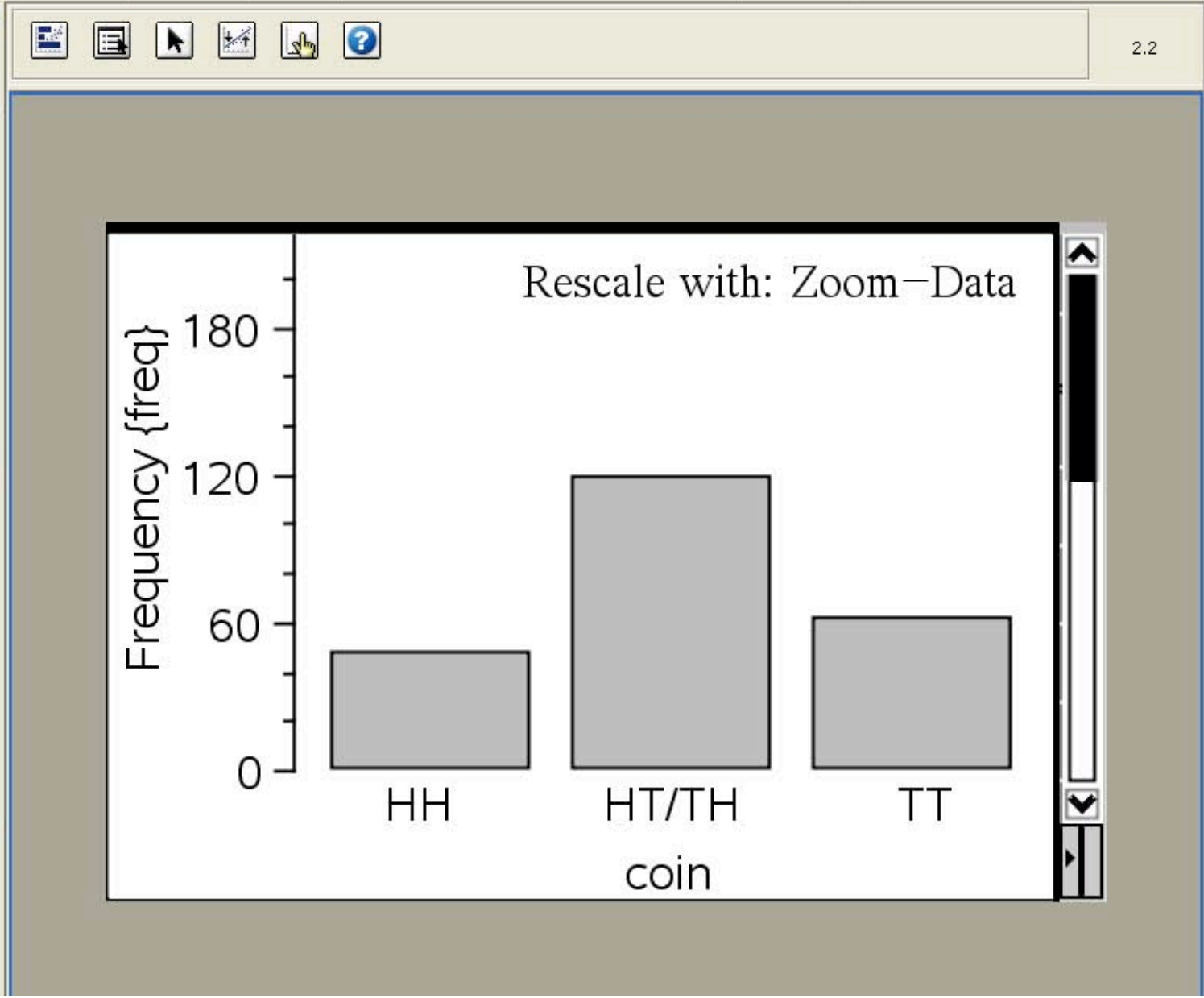
2

3

▼ Problem 2

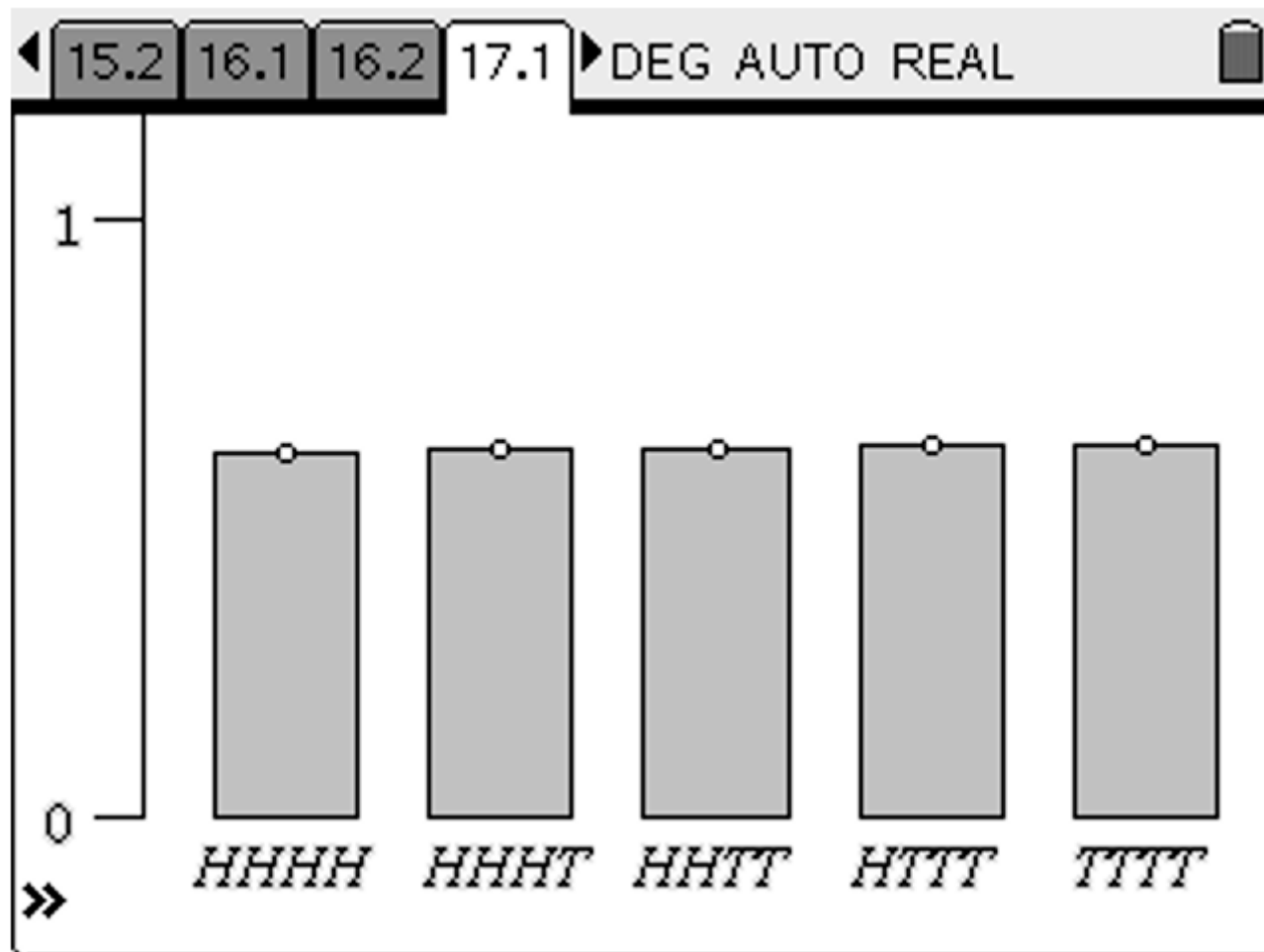
	hhs	hts	htt	tts
21	0	4	4	1
22	3	4	1	
23	1	4	5	
24	1	5	4	
25	4	6	0	

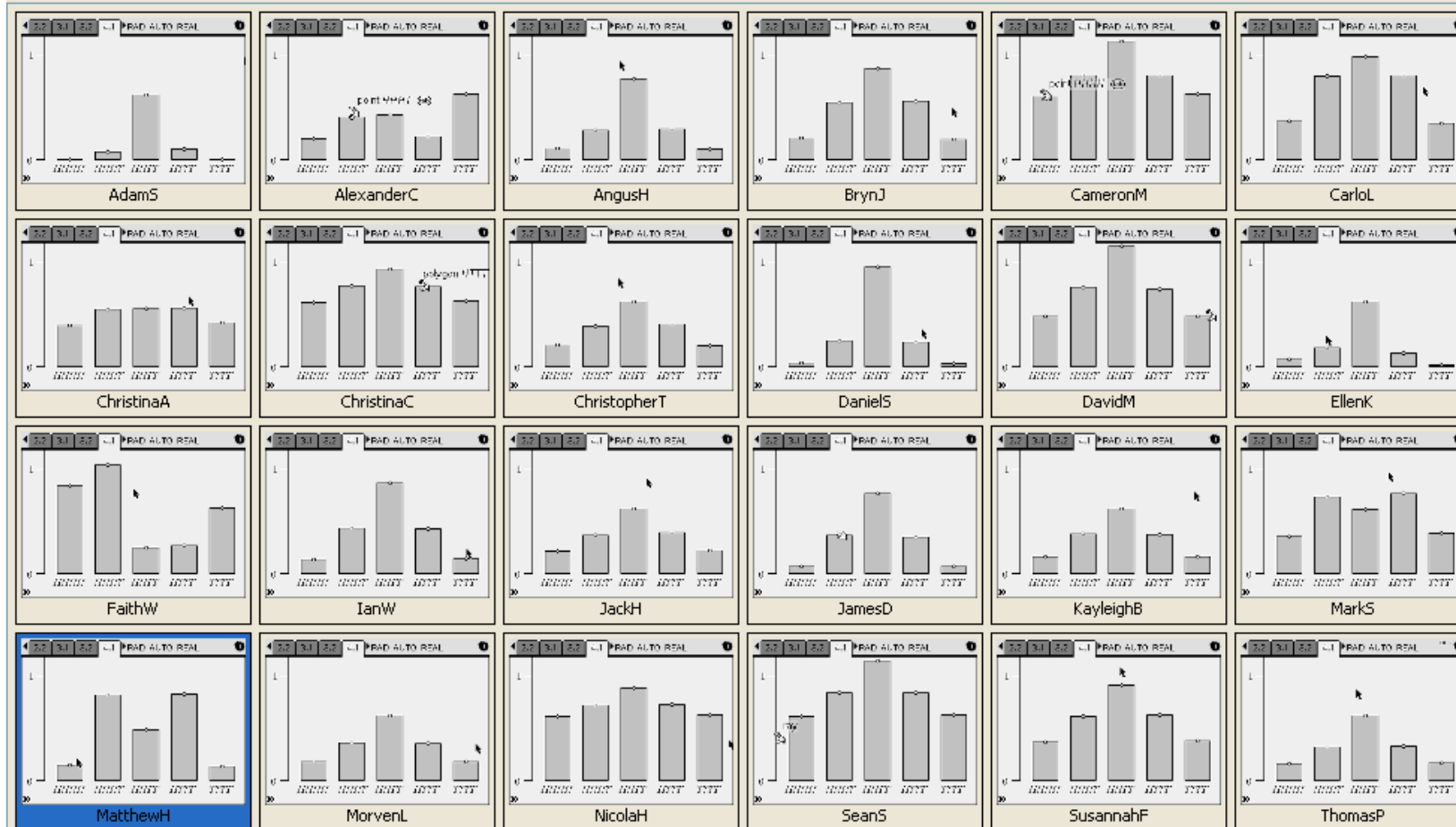
1



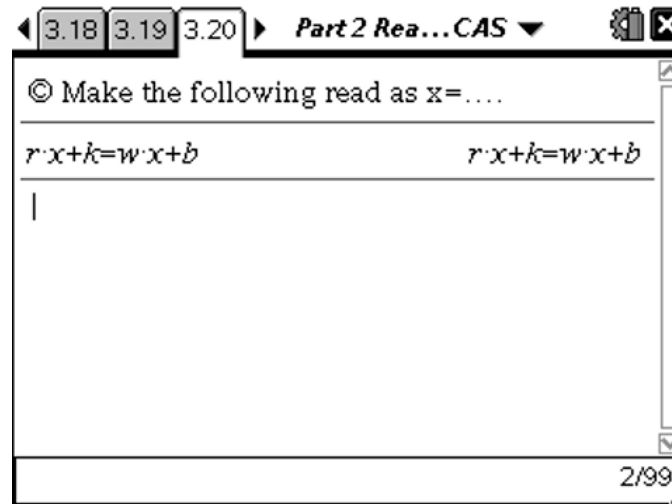
**Toss three Coins several times.
Tally the results.**

Predict for Four Coins





Rearranging Formulae Using CAS



 Video of Kai solving this.

$$3.17) \quad rx + K = wx + b$$

$$rx = wx + b - R$$

$$rx - wx = b - R$$

$$x(r - w) = b - R$$

$$x = \frac{b - R}{r - w}$$

Kai's Test Script (2 weeks later)

$$14) \quad R = \frac{rs}{r+s}$$

$$R(r+s) = rs$$

$$Rr + Rs = rs$$

$$Rr = rs - Rs$$

$$Rr = s(r - R)$$

$$\frac{Rr}{r - R} = s$$



www.CalculatorSoftware.co.uk/mathsfest

for...

all of this talk's materials

details of free software trials

details of free handhelds loans

links to the global Nspire Maths Community!

**Thank you for coming along to this Session
Wishing you all a safe journey home**

Nevil Hopley