

Table of Contents

Introduction to the TI – 83+ Graphing Calculator	1
Lists	1
Clearing data from lists	2
Entering data into lists	2
Removing numbers from lists	2
DIM Errors	2
Using lists for arithmetic or statistical operations	2
Step-by-step example of arithmetic & statistical operations	6
Graphs	9
General instructions for making a graph	9
Step-by-step example for making a graph	10
<i>Lab Activity # 1 – Reaction Time; Using Lists & Making Graphs</i>	13
Calculating a Mathematical Model (Line of Best Fit)	18
Introduction to the LabPro™ Data Collection Interface	22
Using the LabPro™ with a Graphing Calculator	22
Setting up the calculator and LabPro™	22
Installing calculator programs or applications	22
Connecting probes and sensors	23
Collecting data	24
Step-by-step example of collecting data	24
<i>Lab Activity #2 – Cellular Respiration; Collecting Data with the LabPro™</i>	26
Using the LabPro™ with a Computer	30
Setting up to use Logger Pro	30
Connecting probes and sensors	30
Collecting data	30
Step-by-step example	31
Using Logger Pro Labs	35
<i>Lab Activity #3 – The Indy 100; Logger Pro Labs</i>	36
Using Teacher-made Labs	38
<i>Lab Activity #4 - Evaporation; Teacher-made Labs</i>	43
Using Programs other than DataMate	46
Where to get programs	46
Using Graph-Link to send & receive programs / apps	46
Removing programs / apps from the calculator	50
Linking calculator to calculator	50

More Labs	54
Lab Activity #6 - The Work of Muscles; Graphing Calculator	55
Lab Activity #7 – Hot Water; Lab Pro & Graphing Calculator (DataMate)	60
Lab Activity #8 – A Hot Hand; Lab Pro & Computer (Logger Pro Lab)	62
Lab Activity #9 – How Much Energy? (Seasons); Lab Pro & Calculator (PhySci)	64
Resources	75