

Auburn Hills ASC

TI-83/84 CALCULATOR SEMINAR #1

For reservations: phone 232-4064 or E-mail AHASC@OaklandCC.Edu

1 POWER

Press: **ON** To turn on your calculator.

Press: **2nd** **ON** To turn off your calculator.
It will turn off automatically after five minutes.
All data will remain in the calculator even when off.

2 BATTERIES

A The main power is supplied by four AAA batteries.
A message will appear on the screen when these batteries are running low.
When these batteries are changed, the back-up battery supplies power, so no data is lost.

B The back-up power is supplied by a single small disk shaped battery.
If you let both the main and back-up batteries to run down, you will lose all data stored.
There isn't a "low power" indicator on the disk battery, so the math department recommends changing it every other time the AAA batteries are changed. Don't take all the batteries out at the same time, because you will lose all your data.

3 SCREEN CONTRAST

Press and hold: **2nd**  To make the screen darker.

Press and hold: **2nd**  To make the screen lighter.

When making either one of these adjustments, a number between one and nine will appear in the upper right hand corner of the screen. A low number means the batteries are strong, a high number means the batteries are weak, and should be changed soon.

4 ENTERING YOUR PERSONAL ID

Press: **PRGM**  (twice)


Press: **ENTER** To show the program editing screen. Notice the blinking cursor is an "A". This indicates the calculator is in "ALPHA" mode. In this mode the light green characters above each key are active.

Press:   **ENTER** This names the program and moves the cursor to the next line.


Press: **2nd** **ALPHA** Pressing "2nd" then "ALPHA" locks the keys in this mode.

Type: Your name here. **ENTER**

Type: Your phone number here. **ENTER**

Press: **2nd**  To leave program mode.

Press: **PRGM**  **ENTER** To view the program.

Press: **2nd**  To leave program mode.

5 USING THE NEGATIVE KEYEvaluate: $-4 - 8$ Press: $(-)$ 4 $-$ 8 **ENTER**Answer: -12 **6 USING THE POWER KEY**Evaluate: 2^4 Press: 2 \wedge 4 **ENTER**

Answer: 16

7 USING THE ANSWER KEYEvaluate: 2^{40} Press: 2 \wedge 40 **ENTER**

Answer: 1.099511627780E12

Press: **2nd** **ANS** $(-)$ \wedge (1/40) **ENTER**

Answer: 2

8 USING PARENTHESISEvaluate: $\frac{32 - 7}{15 - 10}$ Type: $(32 - 7)/(15 - 10)$

Answer: 5

You must use parenthesis when entering fractions, because of the rules of "order of operations".

Evaluate: $10 - \{4 + 6[3 - 8(10 - 4)] - 4\}$ Type: $10 - (4 + 6(3 - 8(10 - 4)) - 4)$

Answer: 280

Don't use the "{,}" keys for this type of problem. They are for lists.

9 USING THE STORE KEYPress: **STO>** **X,T,θ,n** **ENTER**Press: **X,T,θ,n** **ENTER**

Answer: 280

Evaluate: $3X + 5$ Type: 3 **X,T,θ,n** + 5 **ENTER**

Answer: 845

10 USING EDITING KEYS

Type: $10 - (4 + 6(3 - 8(10 - 4)) - 4)$

ENTER

Answer: 280

A Overwriting numbers

Press:

2nd

ENTRY

ENTER

Enters previous entry onto the screen.

Result: $10 - (4 + 6(3 - 8(10 - 4)) - 4)$

Press:

▲

◀

5

Overwrites "4" with "5".

Result: $10 - (5 + 6(3 - 8(10 - 4)) - 4)$

ENTER

Answer: 279

B Deleting numbers

Press:

2nd

ENTRY

ENTER

Enters previous entry onto the screen.

Result: $10 - (5 + 6(3 - 8(10 - 4)) - 4)$

Press:

▲

◀ (4 times)

DEL

Deletes "0".

Result: $1 - (5 + 6(3 - 8(10 - 4)) - 4)$

ENTER

Answer: 270

C Inserting numbers

Press:

2nd

ENTRY

ENTER

Enters previous entry onto the screen.

Result: $1 - (5 + 6(3 - 8(10 - 4)) - 4)$

Press:

◀

◀

2nd

INS

DEL

Inserts "3" before the "4".

Type: 1

Result: $1 - (5 + 6(3 - 8(10 - 4)) - 34)$

ENTER

Answer: 300

11 FRACTIONS

Type: $(2 / 3) + (1 / 4)$

Result: 0.916667

Press:

MATH

ENTER

This selects the ">Frac" command.

Answer: 11 / 12

12 THE CATALOG

Type: $(1 / 2)^5$

Press:

2nd

CATALOG

0

Press:

▼

Until it is next to ">Frac"

Press:

ENTER

Result: $(1 / 2)^5 >Frac$

Press:

ENTER

Answer:

1 / 32

13 CREATING A TABLE

Solve: Create a table showing what a 15% tip would be for meals \geq to \$10.00.

Press: **Y=** This enters the GRAPH menu.

\Y1= .15 **X,T,θ,n** This enters the equation into the calculator.

Press: **2nd** **TBLSET** **WINDOW** This enters the TABLE menu and parameters.

TblStart= 10 **ENTER** This enters the starting point for the table.

ΔTbl= 1 **ENTER** This increases the table by one dollar at a time.

Indpnt: **Auto** **Ask** This automatically creates the table.

Depend: **Auto** **Ask**

Press: **2nd** **TABLE** **GRAPH** This shows the table.

Answer:

X	Y1
10	1.5
11	1.65
12	1.8
13	1.95
14	2.1
15	2.25

Solve: What would the tip be for a \$52.47 meal?

Press: **2nd** **TBLSET** **WINDOW** **▼** (twice) **▶** Move cursor to "Ask".

Press: **ENTER**

Indpnt: **Auto** **Ask**

Depend: **Auto** **Ask** Puts table in "Ask" mode.

Press: **TABLE** Shows table screen.

Type: 52.47 **ENTER** Calculates tip.

Answer: 7.87