

## TI-73 OVERVIEW

Page 1 of 4

First become familiar with the keyboard.

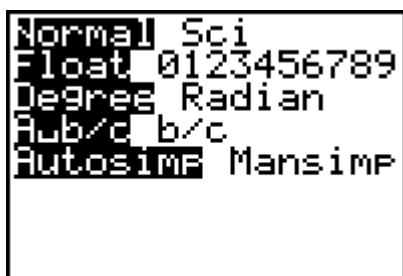
Notice:

- the numeric keypad, including the “opposite” key are in white
- the four binary operations keys, the ENTER key, the four cursor keys and the top row of graphing keys are in medium green
- the remaining keys are darker “forest” green
- except for the single  $\langle 2^{\text{nd}} \rangle$  key which is in lemon yellow. Depressing this key first let's one access the lemon yellow commands above the keys

**ONE VERY COMMON MISTAKE:** Using the opposite symbol for the minus sign and vice versa. Be careful! They are NOT interchangeable.

Let's investigate the MODE key first.

$\langle \text{MODE} \rangle$



Understand the difference between Normal and Sci modes.

Also understand the difference between Float and Fixed decimal modes.

The default settings are on the left side as shown here.

### USING THE TI-73 AS A SCIENTIFIC CALCULATOR

Simplify with the calculator (use Float mode unless specified otherwise):

$$258 - 26.74 =$$

$$357.8 \div 57 =$$

For the next three, use  $\langle 2^{\text{nd}} \rangle \langle \text{ANS} \rangle$  to “bring back” the last answer computed:

$$357.8 \div 57 = \text{(fixed 4)} \underline{\hspace{2cm}} \quad \text{(fixed 2)} \underline{\hspace{2cm}} \quad \text{(fixed 0)} \underline{\hspace{2cm}}$$

$$\pi = \text{(float)} \underline{\hspace{2cm}} \quad \text{(fixed 5)} \underline{\hspace{2cm}} \quad \text{(fixed 4)} \underline{\hspace{2cm}}$$

You can compute with the last answer. Compute:  $5 + 6(\text{ANS}) \underline{\hspace{2cm}}$

Now type:  $16 + 3 * \langle 2^{\text{nd}} \rangle \langle \text{ANS} \rangle \underline{\hspace{2cm}}$  Make sure you understand what the calculator just did. This is a neat feature.

**C 1999 Reardon TI-73 Gifts, Inc.**

Find the distance around a circle whose radius is 6 cm:

Page 2 of 4

- ◆ as an EXACT answer (in terms of  $\pi$ ) \_\_\_\_\_
- ◆ use the  $\pi$  key on the calculator, round the answer to 2 decimal places \_\_\_\_\_
- ◆ use 3.14 as an approximation for  $\pi$  \_\_\_\_\_
- ◆ Compare the above answers and understand the difference between the three of them. It is important for your students to understand this also.

Find the amount of surface covered by a circle whose radius is 6 cm:

- ◆ as an EXACT answer (in terms of  $\pi$ ) \_\_\_\_\_
- ◆ use the  $\pi$  key on the calculator, round the answer to 2 decimal places \_\_\_\_\_
- ◆ use 3.14 as an approximation for  $\pi$  \_\_\_\_\_
- ◆ Compare the above answers and understand the difference between the three of them. It is important for your students to understand this also.

**Remind me to tell you how to be “mean.”**

Using Float mode, simplify:

$$\frac{45.7^2 + 63.48 * 1.089}{417.8 - 2.8 * 48}$$

**Investigate** the editing features on the calculator using  $\langle 2^{\text{nd}} \rangle$   $\langle \text{ENTER} \rangle$ ,  $\langle \text{DEL} \rangle$ ,  $\langle 2^{\text{ND}} \rangle$   $\langle \text{INS} \rangle$ .

**NOTE:** To clear the screen on the calculator, press the  $\langle \text{CLEAR} \rangle$  button.  
The “ESCAPE” key on the calculator is the  $\langle 2^{\text{nd}} \rangle$   $\langle \text{QUIT} \rangle$  button.

Use the UP cursor arrow  $\uparrow$  to review the previous commands you have made.

Use the  $\langle 2^{\text{nd}} \rangle$   $\langle \text{ENTER} \rangle$  deep recall feature to see how many previous commands are kept in the “stack.”

Compute using Float mode:

$$\sqrt{64} =$$

$$\sqrt{3364} =$$

$$\sqrt{284.7 + 569} =$$

How could you use the calculator to help illustrate to your students what the square root symbol means?

Compute using Float mode:  $\sqrt{51} =$  \_\_\_\_\_

Is this answer EXACT? \_\_\_\_\_ Explain.

**FRACTIONS, FRACTIONS, FRACTIONS ...**

Simplify. Write your answer in three equivalent ways: mixed numeral, single fraction, and decimal.

$$\frac{2}{3} + \frac{3}{4} =$$

$$2\frac{3}{4} * 1\frac{3}{5} =$$

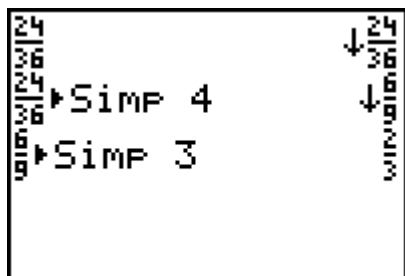
$$\frac{9\frac{5}{6} - 1\frac{1}{4}}{4\frac{1}{3} + \frac{2}{7}} =$$

**Back to MODE.** Investigate the difference between  $A \div b/c$  and  $b/c$ .

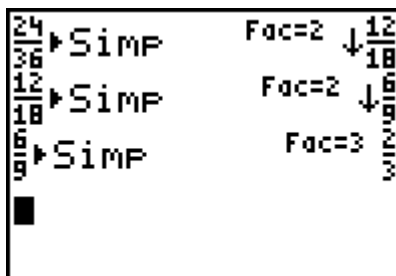
Then put the calculator into Mansimp mode for the following:

Simplify (write in lowest terms):  $\frac{24}{36}$

**One Way (YOU have control)**



**Second Way (TI-73 has control)**



Notice that the down arrow  $\downarrow$  means that the fraction needs to be simplified further.

Take some time and explore the **SIMP** command.

### **DIVISION ( $\div$ ) versus INTEGER DIVISION (INT $\div$ )**

In Float mode, compute:  $25 \div 3 =$  \_\_\_\_\_

$25 <INT \div> 3 =$  \_\_\_\_\_

Experiment a little.

### **UNITS CONVERSION**

*Make the appropriate conversions:*

50 inches is the same as \_\_\_\_\_ feet. 50 in. is also the same as \_\_\_\_\_ ft \_\_\_\_\_ in.

2 days is the same as \_\_\_\_\_ seconds.

100° C is the same temperature as \_\_\_\_\_ degrees in Fahrenheit.

An area of one square foot is the same as \_\_\_\_\_ square inches.

An object that weighs one kilogram is about the same as \_\_\_\_\_ pounds.

A car that travels 60 miles per hour is also traveling \_\_\_\_\_ feet every second.