TI-30XA Calculator Tips

Calculator Memory

- To use the memory function, hit the STO key to store a number in either memory 1, 2, or 3.
 - To store the product of 15π , hit $15 \times \pi = \text{STO 1}$; you will now have $47.1238898 \dots$ stored in memory 1 (M1)
 - To recall the value that is being stored in memory 1 (M1), use the RCL button.
 - RCL 1
 - You do not need to hit the = key to recall a value
 - To clear out a memory, type STO followed by either 1, 2, or 3
 - To clear out the value being stored in memory 1 (M1), hit STO 1
 - When a value is being store in memory 1, you will see M1 in the upper left hand corner of the screen
 - When a memory is cleared, the M1 will disappear

Decimals, fractions, and mixed numbers

- To enter a fraction or a mixed number into the calculator, use the a^{b}/c key near the bottom left-hand corner (just above the \leftarrow key).
 - $\circ \frac{1}{2}$ is entered 1 a^{b}/c 2
 - \circ $3\frac{1}{2}$ is entered 3 a b/c 1 a b/c 2
- To change from a mixed number to an improper fraction, use the 2nd function on the a^{b}/c key $\binom{d}{c}$.
 - To convert $3\frac{1}{2}$ to $\frac{7}{2}$, hit 2nd a b/c
 - $\circ \frac{3}{2} + \frac{3}{4} = 2\frac{1}{4}$ to convert this to an improper fraction, hit 2nd $a \frac{b}{c}$
 - You do not need to use the = key
- To change from a decimal to a mixed number or a fraction, use the 2nd function on the ← key in the bottom left-hand corner.
 - $14 \div 49 = 0.2857$...; to convert this to a fraction, hit 2nd ←
 - You do not need to use the = key
 - This will not work every time, because not every decimal can be written as a fraction

Exponents and Powers

- To raise any base to any power, use the y^x key located directly above the division key
 - \circ 3⁵ is entered 3 y^x 5 =
 - This will not work every time, because not every base can be raised to any power
 - -2 cannot be taken to the power of $\frac{1}{2}$ because the square root of -2 does not exist with real numbers
 - 0 cannot be taken to a negative power because division by zero is not possible
- To raise *e* to a power, use the 2nd function of the LN key (*e*^{*x*}) directly to the left of the OFF button.
 - \circ e^3 is entered 3 2nd LN
 - You do not need to use the = when taking *e* to a power

- To raise 10 to a power, use the 2nd function of the LOG key (10^{*x*}) directly to the left of the LN key.
 - \circ 10⁴ is entered 4 2nd LOG
 - You do not need to use the = when taking 10 to a power
- To raise any base to a power, use the y^x key directly above the division (÷) key.
 - 5^5 is entered 5 y^x 5 =
 - $(-3)^4$ is entered $-3y^x 4 =$

Logarithms

- To approximate a common logarithm (base 10), use the LOG key to the left of the OFF button. Keep in mind, you should only approximate when the directions say to do so; if the directions do not ask you to approximate, you should ALWAYS enter an exact answer.
 - o log 3 is entered 3 LOG
 - You do not need to use the = when finding the logarithm of a value
 - This will not work every time, because the domains of logarithms are restricted
 - log *a* will not work if $a \le 0$ because 10 to a power is <u>ALWAYS</u> positive
- To approximate a natural logarithm (base *e*), use the LN key directly to the left of the OFF button. Again, you should only approximate when the directions say to do so; if the directions do not ask you to approximate, you should ALWAYS enter an exact answer.
 - o ln 3 is entered 3 LN
 - You do not need to use the = when finding the logarithm of a value
 - This will not work every time, because the domains of logarithms are restricted
 - $\ln a$ will not work if $a \le 0$ because *e* to a power is <u>ALWAYS</u> positive