## 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 $15 \pi$, hit $15 \times \pi=$ STO 1; you will now have $47.1238898 \ldots$ 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).
- $\frac{1}{2}$ is entered $1 a b / c 2$
- $3 \frac{1}{2}$ is entered $3 a b / c 1 a b / c 2$
- To change from a mixed number to an improper fraction, use the $2^{\text {nd }}$ function on the $a b / c$ key $(d / c)$.
- To convert $3 \frac{1}{2}$ to $\frac{7}{2}$, hit 2 nd $a b / c$
- $\frac{3}{2}+\frac{3}{4}=2 \frac{1}{4}$; to convert this to an improper fraction, hit 2nd $a b / c$
- You do not need to use the = key
- To change from a decimal to a mixed number or a fraction, use the $2^{\text {nd }}$ function on the $\leftarrow$ key in the bottom left-hand corner.
- $14 \div 49=0.2857 \ldots$; to convert this to a fraction, hit $2 \mathrm{nd} \leftarrow$
- 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
- $3^{5}$ 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 $2^{\text {nd }}$ function of the LN key $\left(e^{x}\right)$ directly to the left of the OFF button.
- $e^{3}$ is entered 32 nd LN
- You do not need to use the $=$ when taking $e$ to a power
- To raise 10 to a power, use the $2^{\text {nd }}$ function of the LOG key $\left(10^{x}\right)$ directly to the left of the LN key.
- $10^{4}$ is entered 42 nd 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 ( $\div$ ) key.
- $5^{5}$ is entered $5 y^{x} 5=$
- $(-3)^{4}$ is entered $-3 y^{x} 4=$


## 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.
- $\log 3$ 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 $a \leq 0$ because 10 to a power is ALWAYS 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.
- $\ln 3$ 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 $a \leq 0$ because $e$ to a power is ALWAYS positive

