CALCULATORS

CHOOSING THE RIGHT CALCULATOR FOR YOUR COURSE
CHOOSING
THE RIGHT CALCULATOR
FOR YOUR COURSE
BEFORE THE SCIENTIFIC CALCULATOR

Before the calculators became so inexpensive and available, we had to learn to use tables and slide rules to calculate mathematical expressions containing exponents and logarithms.

WARNING!
I STILL HAVE A SLIDE RULE AND I KNOW HOW TO USE IT!

The scientific calculator, like the slide rule, requires some training to use it properly and understand the results.
CALCULATORS
FOR 0018 and 0028 MATH COURSES

You can bring a four function calculator to class.

It can only perform the BASIC functions.

Cell phones cannot be used on tests.
THE BASIC CALCULATOR

The BASIC calculator lacks the required functions needed to calculate scientific expressions.
THE GRAPHING CALCULATOR

The more complex graphing scientific calculators are available and very powerful if you plan to study statistics and engineering.

The graphing capability helps you to see and understand functions.

This calculator typically can cost over $100.00.
THE GRAPHING CALCULATOR

Although very helpful as a *learning tool* in checking homework, it is not allowed during mathematics tests.

The only course in which graphing calculators are permitted is in *Elementary Statistics*. 
CALCULATORS FOR UPPER LEVEL MATHEMATICS

The scientific calculator is an invaluable tool while learning math or science.

Scientific calculators are a tool to help you solve complex problems.
There are several manufacturers to choose from, each is laid out a little differently, but usually having the same functions available from the keypad.
PREFERRED CHOICE FOR MAT1033 and COLLEGE ALGEBRA

Priced between $9.00 and $17.00.
Comes in a variety of colors: green, gray, blue, pink & orange.
SCIENTIFIC CALCULATOR

The scientific calculator requires some training to use it properly and understand the results.

Aside from the basic functions of addition, subtraction, multiplication and division...

Many scientific calculators have over a hundred functions available.
SCIENTIFIC CALCULATOR FUNCTIONS

You will need to have a scientific calculator with the following functions:

- Pi \([\pi]\)
- Parentheses
- Square and Square Root
- Change Sign
- Exponential Function
SCIENTIFIC CALCULATOR FUNCTIONS

Some scientific calculators have a SCROLL or UP/DOWN and LEFT/RIGHT set of keys to add functionality.

Many of the functions require multiple keystrokes and secondary or tertiary key modes.
Without the proper understanding of applying the operating principles, there is no guarantee the answer is correct.

The calculator only performs the functions you instruct it. In the order you instruct it. Which is the correct answer for \( \frac{4 + \sqrt{6}}{7} \)?
USING YOUR SCIENTIFIC CALCULATOR

With all of this in mind, it’s important to plan how you enter the values in your calculator.

You have to obey the rules of mathematics.

Remember all those laws: associative, distributive, commutative...

ONE DAY, IN A QUIET OFFICE BUILDING SOMEWHERE, A SMALL CALCULATOR SUDDENLY BECAME SELF-AWARE.

IN EIGHT SECONDS, IT PLOTTED THE EXTINCTION OF ALL MANKIND.

THEN THE BATTERY DIED.

TWO WEEKS LATER, IT WAS THROWN AWAY.
SCIENTIFIC CALCULATOR PRACTICE

Find the square root of 64
2\text{nd}
PRACTICE INPUTTING EXPONENTS

$15^2$  $3^4$
Which is the correct input and answer for

\((-3)^4\)
Which is the correct input and answer for $-3^4$?
PRACTICE USING YOUR CALCULATOR

\[ d = \sqrt{(-5 - 2)^2 + (3 + 9)^2} \]

\[ x = \frac{5 + \sqrt{2}}{3} \]

\[ x = \frac{(-3 + 2) - (4 - 7)}{-9} \]

\[ x = 5\frac{2}{3} + 7\frac{1}{3} \]
CALCULATOR SKILLS

You can only become skilled using your calculator if you take the time to learn how to properly use it. Keep your owner’s guide handy and with you. Work sample problems so that you gain proficiency. Practice using your calculator!