TOPIC 9	**Symbolic Math Toolbox**
SUB-TOPICS	▪ symbolic data type ▪ defining symbolic numbers, variables and functions ▪ manipulating algebraic expressions ▪ plotting with ezplot and ezsurf ▪ polynomial division example (quorem) ▪ partial fraction decomposition example (partfrac) ▪ differentiation and integration of symbolic functions ▪ integration problem (to be solved in class/at home) ▪ list of useful symbolic functions
OBJECTIVES	by the end of this unit, students should be able to: - expand and simplify algebraic expressions - solve algebraic equations - calculate the formula for the derivative or antiderivative of a function - determine the exact value of a definite integral
KEY WORDS AND EXPRESSIONS	on MOLE
CORE STUDY MATERIALS	- Textbook selection - MATLAB Topic 9 Notes
TEXTBOOK STUDY	**Essential Reading** Chapter 1 *Introduction* - Section 1.2.3 (Symbolics and the MUPAD notebook APP) Chapter 17 *Symbolics Toolbox* - Section 17.1 (Algebra) - Section 17.2 (Calculus)
ADDITIONAL RESOURCES	See additional links in the Topic 9 Notes.