

Student _____

Score ____/20

(1 pt. each except where indicated)				
Truss Matrix Problem	Setup Table	1. Set up Table 1 (A matrix and b vector) included completed (by hand)		
		2. b vector is correct		
		3. Force coefficient matrix A is correct		
	Method	4. & 5. Matrix solution method identified and MATLAB code shown (2 pts.)		
	Force Vector Results	6. MATLAB execution result in a 13 element force vector (included in solution)		
		7. Results also presented in formatted table		
		8. Table includes the forces, the member number for each and the units		
		9. & 10. Forces are completely correct (2 pts.)		
	Script: Magnitude and Angle of a Complex #	Hand Calc.	1. Hand calculation of the magnitude, and angle in degrees included and correct	
		Comments	2. Intro. section with the filename, programmer name, date and purpose	
3. A variable definition section that describes all variables,				
Code		4. Script included with Required Comments – completely filling out the comment template or providing equivalent information (ID, purpose, variable list & logic)		
		5. Interactive input of a complex number correctly implemented		
		6. Code includes calculation of the magnitude		
		7. Code includes calculation of angle <u>in degrees</u>		
Test		8. Output and format: program displays magnitude and angle in degrees. Each output is labeled clearly using the disp() function. All other echo printing suppressed.		
		9. Execution produces a magnitude and the angle in degrees		
		10. Output correct for test case used.		
Extra Credit: Phasor Circuit Calculations	Cartesian	1. Current(I) – Correct MATLAB calculation of Cartesian form		
		2. Resistor Voltage (V_R) - Correct MATLAB calculation of Cartesian form		
		3. Inductor Voltage (V_L) - Correct MATLAB calculation of Cartesian form		
	4. Correct conversion of above to polar magnitude & angle			