

K201-Quiz (2D)  
9/24/81

(2 pts) 1. Indicate and explain errors (if any) in the following FORTRAN arithmetic statement:

$$A\&123=(2-5L/AUT\emptyset)**(K+1)/M\emptyset T\emptyset*(\ast 2-K)$$

NOT ALLOWED (points to A&123)  
 WRONG MODE (points to /)  
 NOT NEEDED (points to \emptyset)  
 \* (points to \ast)

(4 pts) 2. Translate the following mathematical expression into an equivalent FORTRAN expression:

$$\frac{(2A-1)(2B+1)-J1}{A^2-B} + (A+3B)^2$$

ADDITIONAL PARENTH (points to (2A-1) and (2B+1))  
 CHANGE MODE (points to /)

$$((2.*A-1.)*(2.*B+1.)-AJ1)/(A**2-B)+(A+3.*B)**2$$

(6 pts) 3. Evaluate the following sequence of FORTRAN statements, given A=3.:

$$B=(A-1)**2-2. \quad (3.-1.)^2-2.=4.-2.=2.$$

$$C=((A+B)*(A-B))/2. \quad (3.+2.)(3.-2.)/2.=5.*1./2.=2.5$$

$$K\emptyset RS=(A+2.*C)/(C-2.*B)/2. \quad (3.+5.)/(2.5-4.)/2.=(8.)/(-1.5)/2.=-2$$

(8 pts) 4. Consider the following card layout:

card columns	Description	Form	Variable name
2-6	Sequence#	Integer	_____
11-23	Name	Alphanumeric	_____
24-25	Credit hours	Integer	_____
38-41	Points	XXX^X	_____

mode!  
 4 variables!  
 mode!  
 mode!

(Decimal point not punched in the data field "Points")

Define variable names and write FORTRAN statements necessary to read this card and enter above data into memory registers associated with variable names.

4	READ(5,u)I,A1,A2,A3,A4,I,D			
	FORMAT(1X,I5,4X,3A4,A1,I2,12X,F4.1)			