

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

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

RAD ØN = (PET-PAUL)*3/(RAD-ØN+1)**5-INPUT

Annotations:
 - Red arrow pointing to the opening parenthesis of the denominator: **TOO MANY LEFT PARENTH.**
 - Red arrow pointing to the closing parenthesis of the denominator: **MODE**
 - Red arrow pointing to the minus sign before INPUT: **MODE**

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

Annotations:
 - Red arrow pointing to the exponent 2: **CHANGE MODE ***
 - Red arrow pointing to the exponent 5: **ADD. PARENTH.**
 - Red arrow pointing to the denominator: **PUT IN PARENTH.**
 - Red arrow pointing to the minus sign before R: **ADD. PARENTH.**

$$\frac{(KAPAI-U)^2 + 5.5B}{A-THETA} - R^{(2+K)}$$

$$((KAPAI-U)**2 + 5.5*B) / (A-THETA) - R**(2+K)$$

(6 pts) 3. Evaluate the following sequence of FORTRAN statements, given A=2.:

B=(A-1.)**2-2. $(2.-1.)^2 - 2. = -1.$
 C=((A+B)*(A-B))/2. $(2.-1.)(2.+1.)/2. = 1.5$
 KØRS=(A+2.*C)/(C-2.*B)/2. $(2.+3.)/(1.5+2.)/2. = 0$

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

Card columns	Description	Form	Variable Names
2-10	Item#	Integer	_____
11-21	Department	Alphanumeric	_____
31-35	Quantity	Integer	_____
38-43	Price	XXXX^XX	_____

mode!
3 variables
mode!
mode!

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

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

READ(5,4)I,A1,A2,A3,I,D					
n FORMAT(IX,I9,2A4,A3,9X, <u>SI</u> ,2X,F6.2)					