

K201-Quiz 2B  
9/23/81

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

A112=(2-3K/MØTØ)\*\*PI/A+123)-K\*\*2

Annotations:  
 - \* after 3: NOT ALLOWED  
 - Ø: WRONG MODE  
 - PI: TOO MANY PAR.  
 - A+123): CHANGE MODE, ADD PARENTH.

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

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

Annotations:  
 - \* after 2: CHANGE MODE  
 - \* after B: ADD PARENTH.

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

(6 pts) 3. Evaluate the following sequence of FORTRAN statements, given A=4.:

B=(A-2.)\*2-2.  $(4.-2.)^2 - 2. = 2.$   
 C=((A+B)\*(A-B))/2.  $(4.+2.)(4.-2)/2. = 6.$   
 KØRS=(A+2.\*C)/(C-2.\*B)/2.  $(4.+12.)/(6.-4)/2. = 4$

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

card columns	Description	Form	Variable name
3-8	Sequence#	Integer	_____
11-25	Name	Alphanumeric	_____
26-27	Credit hours	Integer	_____
39-42	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.

```

READ(5,4),I,A1,A2,A3,A4,I,D
FORMAT(2X,I6,3A4,A3,
FORMAT(2X,I6,2X,3A4,A3,I2,11X,F4.1)
    
```