

K201 Exam  
12/9/74

(30 pts.) 1. Identify any errors in the following FORTRAN statements

- a)  $X2 = (\text{RATE}(3) - \text{RATE}(-3))/D$
  - b) DO 40 I=0,17
  - c)  $X3 = S*T(2.) + 16.$
  - d) DO 40 Y=1,24,3
  - e)  $X4 = A(N)/B(3*N-2)$
  - f)  $X5 = \text{TIME}(2*K/L)$

(20 pts.) 2. What would be the value of M after executing each of the following program segments?

- a) M=0  
DO 13 I=1,20  
13 M=M+1      M= \_\_\_\_\_

b) M=0  
DO 13 I=1,12,2  
13 M=M+1      M= \_\_\_\_\_

c) DO 13 J=1,5  
DO 13 I=1,7  
13 M=M+1      M= \_\_\_\_\_

d) DO 15 I=1,6  
DO 20 J=1,5  
15 M=M+1  
20 M=M-1      M= \_\_\_\_\_

3. Assume that we have an array W composed of 300 elements already stored in the computer memory (i.e., defined and already dimensioned) as a result of a previous portion of the program. Write a program segment (including any needed DIMENSION statements) for each of the following independent purposes:

(10 pts.)      a) Add together the squares of all the elements of W and call the results WSQ.