Tenth of Ramadan City Higher Technological Institute Civil Engineering Department	Programming for Civil Eng. Dr./ Ahmed Azmy CS 199

Sheet (1)

1. Write the following arithmetic expressions in Fortran form:

$(a)\quad x = \dfrac{a^2+b^2+a\times b}{1+\frac{a}{a+b}}$

$(b)\quad V = (a-2b)^3.(3a+b)^2$

$(c)\quad p = 8\left(\sqrt[3]{a^2}+\sqrt{a^2}\right)$

$(d)\quad z = a^{b^2} + b^{a^2}$

2. Determine the results of the following Fortran expressions:

A = 0 B = 10 C = 0.5

$(a)\quad X = A * C + (B * C) ** 2 - \log_{(10)} 10$

$(b)\quad L = B * 2 * 3/A ** 2 - 1$

$(c)\quad A = A * C * (10/B)$

$(d)\quad D = (A + B) * C/B * C$

$(e)\quad F = A + B * C/B * C$

3. State if these variables names are corrected or not, and for correct ones state the type, and for incorrect suggest a correction and type:

BE	XY800ABC
Y	A B
23A	A*A
M-N	

Find the value of these problems:

- 3*2+1
- 3+1*2
- 2**2-4*25+3/2
- 2.0/1
- 3/2
- 3.0/2
- 15/3*2-21/7/3+1
- 28/2**2+5
- 3.0/2.0
- 3*3-27/3