MEMORIAL UNIVERSITY OF NEWFOUNDLAND

Department of Mathematics and Statistics

AMAT-2120 Fall 2004

Assignment 4. Due at 10:00am Wednesday November 17

1. Write a program to solve triangles. Your program must accept 6 command line parameters: three pairs of coordinates of the vertices of a triangle. The results will be: Perimeter, Area, Inradius, Circumradius of the triangle.

Implement these functions as member functions of C++ class Triangle. No computations should be performed in **main()**.

Test your program. In particular, try degenerate configurations, when all three vertices lie on the same line or some of them (or all) coincide.

- 2. Answer the following questions:
- a) $\S 2.1 \text{ (p.42)}, \# 9(a,e,g)$
- b) §3.2 (p.97), #1,2,4
- c) §3.2 (p.99), #12 (note the word address!)
- d) §6.5 (p.259), #2,9.