MIDTERM EXAM - CALCULUS 1

Directions: Solve the equations carefully and box your final answer. Show your solution.

1.
$$y = \sqrt{1 + \sqrt{(x+1)}}$$

2.
$$f(x) = x\sqrt{1 - x^2}$$

3.
$$x^2 - xy + y^2 = 3$$
; find y''

$$4x^2y^7 - 2x = x^5 + 4y^3$$