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Vasile Staicu* (vasile@ua.pt), Department of Mathematics, University of Aveiro, Campus Universitario de Santiago, 3810-193 Aveiro, Portugal. *Multiple solutions for superlinear p -Laplacian Neumann problems.*

We consider a nonlinear Neumann problems driven by the p -Laplacian differential operator with a p -superlinear nonlinearity. Using minimax methods we show that the problem have five nontrivial smooth solutions, two positive, two negative and the fifth nodal. In the semilinear case ($p=2$), using Morse theory, we produce a second nodal solution (for a total of six nontrivial smooth solutions). (Received September 23, 2009)