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We prove the existence of multiple solutions to the problem $-\Delta u - \lambda u = |u|^{2^*-2}u$ in Ω , $u = 0$ on $\partial\Omega$, where Ω is a bounded domain in R^N of dimension $N \geq 4$, $2^* = 2N/(N-2)$ is the critical Sobolev exponent, and $\lambda > 0$. We show that, if λ is not a Dirichlet eigenvalue of $-\Delta$, this problem has at least $(N+1)/2$ solutions. (Received February 20, 2004)