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We investigate three wave interaction when the medium is responding to pump and idler waves as a positive index and to the signal as a negative index material (backward pumping). Depletion of the pump signal and detuning from phase matching are taken into account. We found analytic solutions in both cases and analyzed specific properties of backward pumping based amplification. Amplification in lossy material was analyzed numerically. Second harmonic generation, which occurs in the particular case of three wave interaction in a negative index material, is also considered. (Received February 23, 2010)