1054-60-115 **Alan Krinik*** (`ackrinik@csupomona.edu`), 3801 Temple Avenue, Department of Mathematics and Statistics, California St. Polytechnic University, Pomona, Pomona, CA 91768, and **Ken Shun**. *Markov Processes Having Transition Steps of Size One & Two.*

Conditions and Explicit formulae for the steady state distribution of Markov processes having transition steps of size one and two (in both, finite and countably infinite state spaces) are derived. The queueing performance measure for the average number of customers in the system are then determined. Formulae for the average waiting time in the queueing system are conjectured and confirmed via computer simulations. Examples and comparisons to the classical single server queueing system, M/M/1, are included. (Received September 10, 2009)