1067-11-2361   **Jorge Dioses*** (`jdioses@math.okstate.edu`), Department of Mathematics, Oklahoma State University, Stillwater, OK 74078-1058. *Relations between class numbers of binary cubic forms.*

In 1972, T. Shintani defined four Dirichlet series whose coefficients are class numbers of integral binary cubic forms, two of them for forms with positive discriminant and the other two for forms with negative discriminant. In 1998, J. Nakagawa proved a theorem, originally conjectured by Y. Ohno in 1997, which states that two of these series are essentially the same as the remaining two up to simple constant factors. In this presentation, we generalize these ideas and introduce new series whose coefficients are class numbers of binary cubic forms over the ring of integers in an imaginary quadratic field. We prove that any of these series is also equal to its corresponding dual series up to a constant factor. (Received September 22, 2010)