

1041-11-262

Susil Kumar Jena* (susil_kumar@yahoo.co.uk), Professor, Dept. of Electronics & Telecom
Engg, KIIT University, Bhubaneswar, Orissa 751024, India. *On Some Diophantine Identities.*

In this paper, the author would like to introduce some of the innocent looking but potentially powerful Diophantine identities, called as Dio-identities. These Dio-identities originate when we intelligently manipulate the parameters in some newly discovered algebraic identities. Their inherent beauty becomes evident when we see their patterns; they become powerful when we discover their links with some unsolved problems in number theory. It is the back-ground story of this paper told in a cryptic language, which needs to be deciphered for a surprising audience. (Received August 12, 2008)