Joshua Boone\* (joshua.boone@lmunet.edu). Generalized Cyclotomic Polynomials and Projective Order. Preliminary report.

We introduce  $\Phi_n(x, y)$ , the generalized cyclotomic polynomial, and derive some identities. An application to  $2 \times 2$  matrices of projective order n is given as well. Examples are provided throughout. (Received September 20, 2016)