1077-VJ-531 Wasin So* (wasin.so@sjsu.edu). *Matrices with Equal Power Property*. Preliminary report. In linear algebra, there are two types of matrix-matrix multiplication: the ordinary multiplication and the Hadamard (entry-wise) multiplication. Accordingly, given a square matrix, there are two types of power: ordinary and Hadamard. We are interested in characterizing those matrices having these two types of powers equal. Diagonal matrices are the obvious, but there are many more! (Received September 06, 2011)