Nashine, Hemant Kumar; Dewangan, C. L.
Common fixed points versus invariant approximation for non-convex set in $q$-normed space.
(English) \[ Zbl 1248.41043 \]

Summary: The aim of present paper is to obtain common fixed points as invariant approximation for a
generalized class of contractive non-commuting mappings (not necessarily linear) in a $q$-normed space.
As a consequence, our results generalize the results of R. N. Mukherjee and T. Som [Indian J. Pure Appl.
(2005; \Zbl 1183.41031)]. To achieve our goal, we use Property(G) introduced in [Indian J. Math. 46, No.
2–3, 245–258 (2004; \Zbl 1089.47508)].

MSC:

41A50  Best approximation, Chebyshev systems
47H10  Fixed-point theorems

Keywords:

best approximant; common fixed points; contractive jointly continuous family; starshaped subset; $q$-
normed space