

APPROXIMATING COMMON FIXED POINTS OF NONCOMMUTING ALMOST CONTRACTIONS IN METRIC SPACES

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Abstract. In this paper we prove the existence of coincidence points and common fixed points of noncommuting almost contractions in metric spaces. Moreover, a method for approximating the coincidence points or the common fixed points is also constructed, for which both *a priori* and *a posteriori* error estimates are obtained. These results generalize, extend and unify several classical and very recent related results in literature.

Key Words and Phrases: Metric space, weakly compatible mapping, almost contraction, coincidence point, common fixed point, iterative method, convergence theorem, error estimate, rate of convergence.

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