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Common fixed points under Lipschitz type condition. (English) Zbl 1155.54027
Bull. Korean Math. Soc. 45, No. 3, 467-475 (2008).

This paper contains five theorems. These results include the following: Let f and g be noncompatible pointwise R -weakly commuting self-mappings of a metric space (X, d) satisfying

- (i) $\overline{fX} \subset gX$, where \overline{fX} denotes the closure of range of f ,
 - (ii) $d(fx, fy) \leq k, d(gx, gy), k \geq 0$, and
 - (iii) $d(fx, f^2x) < \max\{d(gx, gfx), d(g^2x, gfx), d(fx, gx), d(f^2x, gfx), d(fx, gfx), d(gx, f^2x)\}$,
- whenever $fx \neq f^2x$. Then f and g have a common fixed point.

Reviewer: [K. Chandrasekhara Rao \(Kumbakonam\)](#)

MSC:

[54H25](#) Fixed-point and coincidence theorems (topological aspects)

Cited in **3** Documents

Keywords:

Lipschitz type mapping pairs; contractive conditions; property (E.A.) noncompatible mappings

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