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نظريات التقارب للتطبيقات الغير التمددية

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Abstract : A brief discussion of the concepts of uniformly convex Banach spaces and strictly convex Banach spaces is included. Several distinguishing features of duality maps and differentiability of norms are highlighted. Various useful results regarding nonexpansive mappings and their fixed points are presented. The weak and strong convergence of the Ishikawa iteration process with T , where T is a nonexpansive mapping and $\{a_n\}$ and $\{b_n\}$ are sequences in $[0,1]$, to some fixed points of the mapping is established in uniformly convex Banach spaces. Various weak and strong convergence results are obtained in uniformly convex Banach spaces for the iteration process with T , where T and S are nonexpansive mappings and $\{a_n\}$ and $\{b_n\}$ are sequences in $[0,1]$. Banach spaces having the well-known Kadec-Klee property are also studied

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