TITLE OF PAPER (PLEASE READ THE ABSTRACT)

FIRST AUTHOR,1 SECOND AUTHOR,1 and THIRD AUTHOR2

ABSTRACT. Normally, the *Annals of Functional Analysis* (*AFA*) publishes “short” papers (16 pages or fewer), the *Banach Journal of Mathematical Analysis* (*BJMA*) “long” papers (14 pages or longer), and *Advances in Operator Theory* (*AOT*) papers of any length within their scopes. Authors are expected to limit references and self-references in their papers to the minimum necessary.

The journal is an author-prepared journal, which means that authors are responsible for the proper formatting of manuscripts by using the style file of the journal.

1. Introduction and preliminaries

*BJMA*, *AFA*, *AOT* are no longer open access. Beginning in 2015, *BJMA* and *AFA* are jointly published by the Tusi Mathematical Research Group and Duke University Press. By submitting a manuscript, the author(s) agree that the copyright for the article is transferred to the (co)publishers, if and when, the paper is accepted for publication.

Here you should state the introduction, preliminaries and your notation. Authors are required to state clearly the contribution of the paper and its significance in the introduction. There should be some survey of relevant literature.

1.1. Instructions for author(s). Manuscripts should be typeset in English with double spacing by using AMS-LaTeX. The authors are encouraged to use this journal style file, which has been developed for standard LaTeX2e.

While you are preparing your paper, please take care of the following:

1. Abstract: 200 words or fewer with no reference numbers therein.

2. MSC2010: Only one Primary item; and at least one Secondary item (We need at least one in MSC43, MSC46, or MSC47).

3. Keywords: At least 3 items and at most 5 items.

4. Authors: Full names, mailing addresses, and e-mail addresses of all authors.

Copyright 2018 by the Tusi Mathematical Research Group.

Date: Received: xxxxxx; Revised: yyyyyy; Accepted: zzzzzz.

*Corresponding author.

2010 *Mathematics Subject Classification*. Primary 39B82; Secondary 44B20, 46C05.

*Key words and phrases*. keyword 1, keyword 2, keyword 3, and keyword 4.
(5) Each Theorem, Proposition, Corollary, Lemma, Definition, Example, etc. should be typeset in its respective environment such as
\begin{theorem}...\end{theorem} and so on.

(6) Margins: A long formula should be broken into two or more lines. Empty spaces in the text should be removed.

(7) Tags (Formula Numbers): Equations and numbered items referred to in the text must be labeled by \texttt{label}\{A\}. References to them must be typeset by using \texttt{eqref}\{A\}. Remove unused tags. Manual numbering of equations or sections must be avoided.

(8) Acknowledgments: At the end of paper but preceding to References.

(9) References: Use \texttt{cite}\{MM\} to refer to the specific book/paper \cite{?} (with \texttt{bibitem}\{MM\}) in the text. Remove unused references. References should be listed in the alphabetical order according to the surnames of the first author at the end of the paper and should be cited in the text as, e.g., \cite{?} or \cite{?, Theorem 4.2}, etc.

(10) Abbreviations: Abbreviations of titles of periodicals/books should be given by using Math. Reviews, see Abbreviations of names of serials or MRLookup.

(11) Citations: Authors are expected to limit references and self-references in their papers to the minimum necessary.

\section{Main results}

The following is an example of a definition.

\textbf{Definition 2.1.} Let $\mathcal{X}$ be a real or complex linear space. A mapping $\| \cdot \| : \mathcal{X} \to [0, \infty)$ is called a 2-norm on $\mathcal{X}$ if it satisfies the following conditions:

\begin{enumerate}
\item $\| x \| = 0 \iff x = 0,$
\item $\| \lambda x \| = \| \lambda \| \| x \| \text{ for all } x \in \mathcal{X} \text{ and all scalar } \lambda,$
\item $\| x + y \|^2 \leq 2 (\| x \|^2 + \| y \|^2) \text{ for all } x, y \in \mathcal{X}.$
\end{enumerate}

Here is an example of a table:

\begin{table}[h!]
\centering
\begin{tabular}{|c|c|c|}
\hline
1 & 2 & 3 \\
\hline
$f(x)$ & $g(x)$ & $h(x)$ \\
\hline
a & b & c \\
\hline
\end{tabular}
\caption{Table 1.}
\end{table}
This is an example of a matrix:
\[
\begin{bmatrix}
1 & -2 \\
3 & 5
\end{bmatrix}
\]

The following is an example of an example.

**Example 2.2.** Let \( \theta : A \to A \) be a homomorphism. Define \( \varphi : A \to A \) by \( \varphi(a) = a_0 \theta(a) \). Then we have
\[
\varphi(a_1 \ldots a_n) = a_0 \theta(a_1 \ldots a_n) = \varphi(a_1) \ldots \varphi(a_n).
\]
Hence \( \varphi \) is an \( n \)-homomorphism.

The following is an example of a theorem and a proof. Please note how to refer to a formula.

**Theorem 2.3.** If \( B \) is an open ball of a real inner product space \( X \) of dimension greater than 1, \( Y \) is a real sequentially complete linear topological space, and \( f : B \setminus \{0\} \to Y \) is orthogonally generalized Jensen mapping with parameters \( s = t > \frac{1}{\sqrt{2}} r \), then there exist additive mappings \( T : X \to Y \) and \( b : \mathbb{R}_+ \to Y \) such that \( f(x) = T(x) + b(\|x\|^2) \) for all \( x \in B \setminus \{0\} \).

**Proof.** First note that if \( f \) is a generalized Jensen mapping with parameters \( t = s \geq r \), then
\[
f(\lambda(x + y)) = \lambda f(x) + \lambda f(y) \\
\leq \lambda (f(x) + f(y)) \\
= f(x) + f(y)
\]
for some \( \lambda \geq 1 \) and all \( x,y \in B \setminus \{0\} \) such that \( x \perp y \). Now the result can be deduced from (??). \( \square \)

The following is an example of a remark.

**Remark 2.4.** One can easily conclude that \( g \) is continuous by using Theorem ??.

Again, note how we refer to Theorem ?? and formula (??).

**Acknowledgments.** Acknowledgments may be placed at the end of the text, immediately preceding the references.

**References**


1Department of Mathematics, University of AAAA, BBBB 654321, CCCC, India.
   E-mail address: first1@afa.ac.ir; first2@afa.ac.ir

2Department of Pure Mathematics, Ferdowsi University of Mashhad, P. O. Box 1159, Mashhad 91775, Iran;
Tusi Mathematical Research Group (TMRG), Mashhad, Iran.
   E-mail address: second@afa.ac.ir