The paper is a good piece of work on a subject that attracts considerable attention.

I am pleased to It is a pleasure to I strongly	recommend it for publication in Studia Mathematica.

The only remark I wish to make is that condition B should be formulated more carefully.
A few minor typographical errors are listed below.
I have indicated various corrections on the manuscript.

The results obtained are not particularly surprising and will be of limited interest.

The results are	correct but only moderately interesting. rather easy modifications of known facts.

The example is worthwhile but not of sufficient interest for a research article.
The English of the paper needs a thorough revision.
The paper does not meet the standards of your journal.

Theorem 2 is false	as stated. in this generality.

Lemma 2 is known (see .....)
Accordingly, I recommend that the paper be rejected.

PART B: SELECTED PROBLEMS OF ENGLISH GRAMMAR

INDEFINITE ARTICLE (a, an, —)

Note: Use "a" or "an" depending on *pronunciation* and not spelling, e.g. a unit, an x.

1. Instead of the number "one":

The four centres lie in **a** plane.
A chapter will be devoted to the study of expanding maps.
For this, we introduce **an** auxiliary variable z.

2. Meaning "member of a class of objects", "some", "one of":

Then D becomes **a** locally convex space with dual space D'.
The right-hand side of (4) is then **a** bounded function.
This is easily seen to be **an** equivalence relation.
Theorem 7 has been extended to **a** class of boundary value problems.
This property is **a** consequence of the fact that .....
Let us now state **a** corollary of Lebesgue's theorem for .....
After **a** change of variable in the integral we get .....
We thus obtain the estimate ..... with **a** constant C.

in the plural:

The existence of partitions of unity may be proved by .....
The definition of distributions implies that .....
....., with suitable constants.
....., where G and F are differential operators.

3. In definitions of classes of objects (i.e. when there are many objects with the given property):

A fundamental solution is a function satisfying .....
We call C **a** module of ellipticity.
A classical example of **a** constant C such that .....
We wish to find **a** solution of (6) which is of the form .....

in the plural:

The elements of D are often called test functions.

the set of	points with distance 1 from K all functions with compact support

The integral may be approximated by sums of the form .....
Taking in (4) functions v which vanish in U we obtain .....
Let f and g be functions such that .....

4. In the plural—when you are referring to each element of a class:

   Direct sums exist in the category of abelian groups.
   In particular, **c**losed sets are Borel sets.
   Borel measurable functions are often called Borel mappings.
   This makes it possible to apply H_2-results to functions in any H_p.

   If you are referring to all elements of a class, use "the":

   The real measures form a subclass of **the** complex ones.

5. In front of an adjective which is intended to mean "having this particular quality":

   This map extends to all of M in **an** obvious fashion.
   A remarkable feature of the solution should be stressed.

   Section 1 | gives **a** condensed exposition of .....
   | describes in **a** unified manner the recent results .....

   A simple computation gives .....
   Combining (2) and (3) we obtain, with **a** new constant C, ...
   A more general theory must be sought to account for these irregularities.
   The equation (3) has **a** unique solution g for every f.
   But: (3) has **the** unique solution $g = ABf$.

DEFINITE ARTICLE (the)

1. Meaning "mentioned earlier", "that":

   Let $A \subset X$. If $aB = 0$ for every B intersecting **the** set A, then .....
   Define $\exp x = \Sigma x^i/i!$. **The** series can easily be shown to converge.

2. In front of a noun (possibly preceded by an adjective) referring to a single, uniquely determined object (e.g. in definitions):

   Let f be **the** linear form | $g \mapsto (g, F)$.
   | defined by (2). [If there is only one.]

   So $u = 1$ in **the** compact set K of all points at distance 1 from L.
   We denote by $B(X)$ **the** Banach space of all linear operators in X.
   ....., under **the** usual boundary conditions.
   ....., with **the** natural definitions of addition and multiplication.
   Using **the** standard inner product we may identify .....

3. In the construction: the + property (or another characteristic) + of + object:

   The continuity of f follows from .....
   The existence of test functions is not evident.
   There is a fixed compact set containing **the supports of** all the f^j.
   Then x is **the centre of** an open ball U.
   The intersection of a decreasing family of such sets is convex.

But: Every nonempty open set in $\mathbb{R}^k$ is **a union of** disjoint boxes.
[If you wish to stress that it is some union of not too well specified objects.]

4. In front of a cardinal number if it embraces all objects considered:

   The two groups have been shown to have the same number of generators. [Two groups only were mentioned.]
   Each of **the** three products on the right of (4) satisfies .....
   [There are exactly three products there.]

5. In front of an ordinal number:

   The first Poisson integral in (4) converges to g.
   The second statement follows immediately from **the first**.

6. In front of surnames used attributively:

the Dirichlet problem **the** Taylor expansion **the** Gauss theorem	*But*:	Taylor's formula [without "the"] **a** Banach space

7. In front of a noun in the plural if you are referring to a class of objects as a whole, and not to particular members of the class:

   The real measures form a subclass of **the** complex ones.
   This class includes **the** Helson sets.

ARTICLE OMISSION

1. In front of nouns referring to activities:

   Application of Definition 5.9 gives (45).
   Repeated application ⟨use⟩ of (4.8) shows that .....
   The last formula can be derived by **d**irect consideration of .....
   Thus A is the smallest possible extension in which **d**ifferentiation is always possible.
   Using **i**ntegration by parts we obtain .....
   If we apply **i**nduction to (4), we get .....
   Addition of (3) and (4) gives .....
   This reduces the solution to **d**ivision by Px.
   Comparison of (5) and (6) shows that .....

2. In front of nouns referring to properties if you mention no particular object:

   In questions of **u**niqueness one usually has to consider .....
   By **c**ontinuity, (2) also holds when $f = 1$.
   By **d**uality we easily obtain the following theorem.
   Here we do not require **t**ranslation invariance.

3. After certain expressions with "of":

a **type of** convergence	the **hypothesis of** positivity
a **problem of** uniqueness	the **method of** proof
the **condition of** ellipticity	the **point of** increase

4. In front of numbered objects:

It follows from **Theorem 7** that .....
Section 4 gives a concise presentation of .....
Property (iii) is called the triangle inequality.
This has been proved in **part (a)** of the proof.

But: the set of solutions of **the** form (4.7)
To prove **the** estimate (5.3) we first extend .....
We thus obtain **the** inequality (3). [*Or*: inequality (3)]
The asymptotic formula (3.6) follows from .....
Since **the** region (2.9) is in U, we have .....

5. To avoid repetition:

the order and symbol of a distribution
the associativity and commutativity of A
the direct sum and direct product
the inner and outer factors of f [Note the plural.]

But: **a** deficit or **an** excess

6. In front of surnames in the possessive:

Minkowski's inequality, *but*: **the** Minkowski inequality
Fefferman and Stein's famous theorem,
more usual: the famous Fefferman–Stein theorem

7. In some expressions describing a noun, especially after "with" and "of":

an algebra **with** unit e; an operator **with** domain H^2; a solution **with** vanishing Cauchy data; a cube **with** sides parallel to the axes; a domain **with** smooth boundary; an equation **with** constant coefficients; a function **with** compact support; random variables **with** zero expectation
the equation **of** motion; the velocity **of** propagation;
an element **of** finite order; a solution **of** polynomial growth;
a ball **of** radius 1; a function **of** norm p

But: elements of **the** form $f = \dots$
a Banach space with **a** weak symplectic form w
two random variables with **a** common distribution

8. After forms of "have":

It has | finite norm.
| compact support.

But: It has | **a** finite norm not exceeding 1.
| **a** compact support contained in I.

It has | rank 2.
| cardinality c.
| absolute value 1.
| determinant zero.

But: It has | **a** zero of order at least 2 at the origin.
| **a** density g.
[Unless g has appeared earlier; then: It has density g.]

9. In front of the name of a mathematical discipline:

This idea comes from game theory ⟨homological algebra⟩.

But: in **the theory of** distributions

10. Other examples:

We can assume that G is **in diagonal form.**
Then A is deformed into B by pushing it **at constant speed** along the integral curves of X.
G is now viewed as a set, **without group structure**.

INFINITIVE

1. Indicating aim or intention:

To prove the theorem, we first let .....

We now apply (5) | **to study** the group of .....
| **to derive** the following theorem.
| **to obtain** an x with norm not exceeding 1.

Here are some examples **to show** how .....

2. In constructions with "too" and "enough":

This method is **too** complicated **to** be used here.
This case is important **enough to** be stated separately.

3. Indicating that one action leads to another:

We now apply Theorem 7 **to get** $Nf = 0$. [= ..... and we get $Nf = 0$]
Insert (2) into (3) **to find** that .....

4. In constructions like "we may assume M to be .....":

We may **assume** M **to be** compact.
We **define** K **to be** the section of H over S.
If we **take** the contour G **to lie** in U, then .....
We **extend** f **to be** homogeneous of degree 1.
The class A is defined by **requiring** all the functions f **to satisfy** .....
Partially order P by **declaring** $X < Y$ **to mean** that .....

5. In constructions like "M is assumed to be .....":

The map M
- is **assumed** ⟨expected/found/considered/taken/claimed⟩ **to be** open.
- will be **chosen to satisfy** (2).
- can be **taken to be** constant.
- can easily be **shown to have** .....
- is also **found to be** of class S.

This investigation is **likely to produce** good results.
[= It is very probable it will]
The close agreement of the six elements is **unlikely to be** a coincidence. [= is probably not]

6. In the structure "for this to happen":

For this to happen, F must be compact.
[= In order that this happens]
For the last **estimate to hold**, it is enough to assume .....
Then **for such a map to exist**, we must have .....

7. As the subject of a sentence:

To see that this is not a symbol **is** fairly easy.
[*Or*: It is fairly easy to see that .....]
To choose a point at random in the interval $[0, 1]$ **is** a conceptual experiment with an obvious intuitive meaning.
To say that u is maximal **means** simply that .....

After expressions with "it":

It is necessary ⟨useful/very important⟩ **to consider** .....
It makes sense to speak of .....
It is therefore **of interest to look** at .....

8. After forms of "be":

Our goal ⟨method/approach/procedure/objective/aim⟩ **is to find** .....
The problem ⟨difficulty⟩ here **is to construct** .....

9. With nouns and with superlatives, in the place of a relative clause:

The theorem **to be proved** is the following. [= which will be proved]
This will be proved by the method **to be described** in Section 6.
For other reasons, **to be discussed** in Chapter 4, we have to .....
He was **the first to propose** a complete theory of .....
They appear to be **the first to have suggested** the now accepted interpretation of .....

10. After certain verbs:

These properties **led** him **to suggest** that .....
Lax **claims to have obtained** a formula for .....
This map **turns out to satisfy** .....
At first glance M **appears to differ** from N in two major ways: .....

A more sophisticated argument **enables** one **to prove** that .....
[*Note*: "enable" requires "one", "us" etc.]
He **proposed to study** that problem. [*Or*: He proposed studying .....]
We **make** G **act** trivially on V.
Let f **satisfy** (2). [*Not*: "Let f satisfies"]
We **need to consider** the following three cases.
We **need not consider** this case separately.
["need to" in affirmative clauses, without "to" in negative clauses; also note: "we only need to consider", but: "we need only consider"]

ING-FORM

1. As the subject of a sentence (note the absence of "the"):

Repeating the previous argument and **using** (3) **leads** to .....
Since **taking** symbols **commutes** with lifting, A is .....
Combining Proposition 5 and Theorem 7 **gives** .....

2. After prepositions:

After making a linear transformation, we may assume that .....
In passing from (2) to (3) we have ignored the factor n.
In deriving (4) we have made use of .....
On substituting (2) into (3) we obtain .....
Before making some other estimates, we prove .....
The trajectory Z enters X **without meeting** $x = 0$.
Instead of using the Fourier method we can multiply .....
In addition to illustrating how our formulas work, it provides .....
Besides being very involved, this proof gives no information on .....
This set is obtained **by letting** $n \to \infty$.
It is important to pay attention to domains of definition **when trying** to .....
The following theorem is the key **to constructing** .....
The reason **for preferring** (1) to (2) is simply that .....

3. In certain expressions with "of":

The **idea of combining** (2) and (3) came from .....
The **problem** considered there was that **of determining** WF(u) for .....
We use the **technique of extending** .....

This method has the **disadvantage of**
- **being** very involved.
- **requiring** that f be positive. [Note the infinitive.]

Actually, S has the much stronger **property of being** convex.

4. After certain verbs, especially with prepositions:

We **begin by analyzing** (3).
We **succeeded** ⟨were successful⟩ **in proving** (4).
[*Not*: "succeeded to prove"]
We next **turn to estimating** .....
They **persisted in investigating** the case .....
We are **interested in finding** a solution of .....
We were **surprised at finding out** that .....
[*Or*: surprised to find out]
Their study **resulted in proving** the conjecture for .....
The success of our method will **depend on proving** that .....
To compute the norm of ..... **amounts to finding** .....
We should **avoid using** (2) here, since .....
[*Not*: "avoid to use"]
We **put off discussing** this problem to Section 5.
It **is worth noting** that ..... [*Not*: "worth to note"]
It is worth while discussing here this phenomenon.
[*Or*: worth while to discuss; "worth while" with ing-forms is best avoided as it often leads to errors.]
It is an idea **worth carrying out**.
[*Not*: "worth while carrying out", *nor*: "worth to carry out"]
After **having finished proving** (2), we will turn to .....
[*Not*: "finished to prove"]
However, (2) **needs handling** with greater care.
One more case **merits mentioning** here.
In [7] he **mentions having proved** this for f not in S.

5. Present Participle in a separate clause (note that the subjects of the main clause and the subordinate clause must be the same):

We show that f satisfies (2), thus **completing** the analogy with .....
Restricting this to R, **we** can define .....
[*Not*: "Restricting ....., the lemma follows". The lemma does not restrict!]
The set A, **being** the union of two intersecting continua, is connected.

6. Present Participle describing a noun:

We need only consider paths **starting** at 0.
We interpret f as a function with image **having** support in .....
We regard f as **being** defined on .....

7. In expressions which can be rephrased using "where" or "since":

Now J is defined to equal Af, the function f **being** as in (3).
[= where f is .....]
This is a special case of (4), the space X here **being** $B(K)$.
We construct three maps of the form (5), each of them **satisfying** (8).
Then $\lim_t a(x,t) < 1$, the limit **being assumed** to exist for every x.

The ideal is defined by $m = \ldots$, it **being understood** that .....
Now, F **being** convex, we can assume that ..... [= since F is .....]
Hence $F = \emptyset$ (it **being** impossible to make A and B intersect).
[= since it is impossible]

[Do not write "a function being an element of X" if you mean "a function which is an element of X".]

8. In expressions which can be rephrased as "the fact that X is .....":

Note that M **being** cyclic implies F is cyclic.
The probability of X **being** rational equals 1/2.
In addition to f **being** convex, we require that .....

PASSIVE VOICE

1. Usual passive voice:

This theorem was proved by Milnor in 1976.

In items 2–6, passive voice structures replace sentences with subject "we" or impersonal constructions of other languages.

2. Replacing the structure "we do something":

This identity **is established** by observing that .....
This difficulty **is avoided** above.
When this **is substituted** in (3), an analogous description of K is obtained.
Nothing **is assumed** concerning the expectation of X.

3. Replacing the structure "we prove that X is":

The function M | **is** easily **shown to have** .....
| may **be said to be** regular if .....

This equation **is known to hold** for .....

4. Replacing the construction "we give an object X a structure Y":

Note that E **can be given a** complex **structure** by .....
The letter A **is** here **given a bar** to indicate that .....

5. Replacing the structure "we act on something":

This order behaves well when g **is acted upon** by an operator.
Hence F **can be thought of** as .....
So all the terms of (5) **are accounted for**.
The preceding observation, when **looked at** from a more general point of view, leads to .....
In the physical context already **referred to**, K is .....