

## INFINITIVE AND GERUND

*Adapted from Trzeciak Jerzy, Writing Mathematical Papers in English. European Mathematical society, 1995*

### Infinitive

- a) Indicating aim or intention
- b) In constructions with too and enough
- c) Indicating that one action leads to another
- d) In constructions like “we may assume  $M$  to be .....
- e) In construction like “ $M$  is assumed to be.....”
- f) In the structure “for this to happen”
- g) As the subject of a sentence
- h) After forms of “be”
- i) With nouns and with superlatives, in the place of a relative clause
- j) After certain verbs (lead, claim, turn out, appear, need, make)

### ing-form

- a) As the subject of a sentence
- b) After prepositions (after, on, in, instead of, besides, for, etc.)
- c) In certain expressions with “of”
- d) After certain verbs, especially with prepositions (begin, succeed, persist, result, put off, worth noting, merit, etc)
- e) Present Participle in a separate clause (subjects of the main and subordinate clause are the same)
- f) Present Participle describing a noun
- g) In expressions which can be rephrased using “where” or “since”
- h) In expressions which can be rephrased as “the fact that  $X$  is .....

### Exercise. Fill in the spaces with infinitive or gerund forms of verbs.

- 1) We define  $K$  ..... the section of  $H$  over  $S$ . (be)
- 2) After ..... a linear transformation, we may assume that (make)
- 3) We use the technique of ..... (extend)
- 4) After having finished .....(2), we will turn to (prove)
- 5) We need only consider paths .....at 0. (start)
- 6) .....that this is not a symbol is fairly easy. (see)
- 7) For this .....,  $F$  must be compact. (happen)
- 8) Instead of .....the Fourier method we can multiply (use)
- 9) Actually,  $S$  has the much stronger property of .....convex. (be)
- 10) .....proposition 5 and Theorem 7 gives (combine)
- 11) Note that  $M$  .....cyclic implies  $F$  is cyclic. (be)
- 12) .....this to  $R$ , we can define (restrict)
- 13) We put off .....this problem to Section 5. (discuss)
- 14) Now,  $F$  .....convex, we can assume that (be)
- 15) This map turns out ..... (satisfy)
- 16) We need .....the following three cases. (consider)
- 17) The problem here is ..... (construct)
- 18) The map  $M$  is assumed .....open. (be)
- 19) We now apply (5) .....an  $x$  with norm exceeding 1. (obtain)
- 20) This case is important enough ..... separately. (be stated)
- 21) We make  $G$  .....trivially on  $V$ . (act)
- 22) These properties led him ..... that (suggest)
- 23) He proposed .....that problem. (study)
- 24) .....the previous argument and using (3) leads to (repeat)
- 25) We begin by .....(3). (analyze)