

IMA50 style guide

Document format

- Latex is the preferred medium. A latex style file is available at <http://plus.maths.org/content/want-be-popular-maths-author> please avoiding using any additional class files or macros
- Microsoft word is also acceptable.
- Whichever format you use, please let us have all the source files and a .pdf of the article when you submit it.

Equations and maths

- Try to minimise the number of equations. Absence of equations is fine, as is, say, up to five displayed equations per article.
- Equations should only be used if they are the best way to illustrate the concept or idea.
- Small mathematical expressions can also be included in the body of the text.
- Try to avoid using equation numbers. If they become necessary it's probably a sign that there are too many equations in the text.
- Always explain equations and mathematical expressions in full. If you can't then the equation shouldn't be there.
- Don't use Definition 1, Theorem 1, etc. Don't use formal definitions at all, and theorems only when absolutely necessary.
- Never say that something is "obvious" unless it is glaringly obvious
- Don't assume that people know that n usually stands for a natural number and epsilon for a very small one, etc.
- Imagine that the average reader of the article has studied maths up to age 18 (including elementary calculus). The majority of the articles should be accessible for those who have studied less, and should not be over trivial for those that have more expertise.

Punctuation and abbreviations

- Keep punctuation to a minimum.
- Avoid exclamation marks!
- Only use quotation marks for genuine quotes (repeating someone else's words) and use single (') rather than double (") quotes.
- Use dots for abbreviations such as e.g., etc. i.e., but do not use italics. Keep use of such abbreviations to a minimum.
- Try to avoid over use of parenthetical expressions in brackets (except when really necessary)

Capitalisation

- Keep capitalisation to a minimum, only for names, places and titles. Book titles should be italicised and only the first word capitalised, e.g. *Letters to a young mathematician*.

Spelling

- Use British spelling (realise rather than realize, colour rather than color, etc.).

Numbers

- Units (e.g. lengths, weights, also mathematical numbers) should be numerals. Others should be written out up to twelve, and numerals above. So: 1 metre, five people, 25 apples, the point 0 on the number line.

Technical terms

- Avoid jargon at all cost.
- Only introduce technical terms when absolutely necessary and explain their meaning straight away.
- Indicate that something is a technical term by italicising it (not by using quotes) and do not capitalise. E.g. “this is a *triangular number*” rather than “this is a ‘Triangular Number’”.
- Always explain acronyms and avoid them if possible. If you are going to use something many times throughout the article, give the phrase in full the first time it is used followed by the acronym in brackets, and use the acronym from then on. For example the Large Hadron Collider (LHC) can thereafter be referred to as the LHC.

People

- Only name-check people when absolutely necessary for the story. E.g. it’s not necessary to say who exactly proved a minor result, but when talking about Fermat’s last theorem mentioning Andrew Wiles might add to the story.
- Refer to people by their full names, e.g. Grigory Perelman the first time they are mentioned, and use surnames from then on.
- Leave out titles and affiliations.
- Do not use expressions like “et al.”

References and footnotes

- No footnotes, no academic-style references.

- Up to three further reading items for each article which should be included as a simple list at the end of the article.

Pictures and diagrams

- Pictures and illustrations are allowed but should be kept to a minimum.
- All such illustrations will be reproduced in black and white and so must work well in black and white – both in terms of clarity and aesthetics.
- If there is more than one figure in the article, you should use academic style references to them, e.g. “this is shown in figure 1” (note lower case “figure”) as we may not be able to control the exact location of figures.

Colloquialisms

- Colloquial language is O.K. within reason, but remember the book is aimed at an international audience.
- It’s O.K. to use “don’t”, “won’t”, “can’t” etc.

Language

- **Do not** use sexist language. So it’s “humankind” rather than “mankind”, etc. Don’t use “he” as a default when referring to someone whose gender is unknown.
- Please avoid any personal attacks or criticisms of specific individuals, whether alive or dead.
- Generally use active rather than passive voice, as this is more dynamic, e.g. “We can understand this equation by looking at the graph” rather than “this equation can be understood by looking at the graph”
- Generally use verbs rather than nouns, e.g. “The researchers investigated” rather than “The researchers conducted an investigation”
- Look out for words like “very”, “actually”, “notwithstanding”. Often they are unnecessary and a sentence is better off without them, though of course they do sometimes work well for effect.