

Quiz on “Writing a Math Phase Two Paper”

Part II. Language

- (1) What does the word “language” mean in the subject of writing?
- (2) Why must you watch your language when you write?
- (3) What is the royal road to good writing?
- (4) What produces precise writing?
- (5) How do you find the right word?
- (6) Why is it important to give specific and concrete details?
- (7) Does strong writing require using synonyms?
- (8) What produces clear writing? Explain.
- (9) How can the pronouns “it,” “this,” and “which.” be confusing?.
- (10) Are the pronouns “that” and “which” interchangeable?
- (11) Why is punctuation is used?

- (12) When should optional punctuation be used?
- (13) Is it better to write “M.I.T.” or “MIT”? Why so?
- (14) What are four common uses of the comma?
- (15) What is wrong with the next sentence? Use colons to introduce: lists, explanations, and displays.
- (16) Is jargon inherently bad?
- (17) When should numbers be written out?
- (18) When is it acceptable to begin a sentence with a numeral or a symbol?
- (19) What is a forthright writing style?
- (20) Is it desirable to avoid the passive voice?
- (21) Is it acceptable to use “I”?
- (22) When is it acceptable to use “we”?
- (23) Improve this sentence: By solving the equation, it is found that the roots are real.
- (24) What is wrong with the next sentence? Solving the equation, the roots are real.
- (25) Is it acceptable to use the personal pronoun “one”? Is it desirable?
- (26) Why is concise writing desirable?

- (27) Improve this sentence: In order to find the solution of the equation, we can use one of two alternative methods.
- (28) What's the difference between wordiness and redundancy?
- (29) To help avoid wordiness, what's a good rule to keep in mind?
- (30) What disturbs the flow of text?
- (31) How can the flow be smoothed out?
- (32) If you have to choose between fluidity and clarity, which one must you choose?
- (33) Where do readers expect to find the stress of a sentence.
- (34) Which are preferable, images or abstractions?
- (35) What advantages do illustrations provide?
- (36) Since illustrations cannot stand alone, what must you do?
- (37) Why are formulas difficult to read?
- (38) How can you make formulas easier to read?
- (39) When should a formula be displayed?
- (40) How should a displayed formula be punctuated?
- (41) Which is better a conceptual proof or a computational one? Why so?

(42) Improve the following sentences, noting what is wrong with each one.

(40) Consider S_q , $q = 1, \dots, n$.

(41) Let S be the set of all numbers of absolute value < 1 .

(42) $ax^2 + bx + c = 0$ has real roots if $b^2 - 4ac \geq 0$.

(43) If $\Delta = b^2 - 4ac \geq 0$, then the roots are real.

(44) If $\Delta \geq 0$, $ax^2 + bx + c = 0$ has real roots.

(45) If the discriminant, Δ , is nonnegative, then the roots are real.