

CCML Guidelines for Acceptable Forms of Answers

Have you ever taken a CCML contest only to find out that an answer that you thought was correct was marked wrong? It's a very disappointing feeling. We feel the same disappointment too when we're in the grading room and we have to mark one of your answers wrong. It pains us to see how close you came to writing a correct answer, but we cannot give you credit because your answer was not written in an acceptable form.

Please understand that we don't take points off because we don't like you (not true!). We take points off because there are rules and conventions about what correct answers should look like at math competitions. Before you start today's competition, take a few minutes to read over these guidelines. We want you to earn as many points as possible!

RECOMMENDATIONS:

- 1) Simplify all fractions and radicals!
- 2) Don't write two equivalent answers, such as $\frac{1}{2} = 0.5$. One correct form of the answer is sufficient.
- 3) Do **NOT** round unless the problem specifies that you can!
- 4) For problems in which you are asked to round the answer to a specific decimal place or a certain number of significant digits, follow the instructions. For example, 0.2978 is 0.3 when rounded to the nearest tenth, 0.30 when rounded to the nearest hundredth, and 0.298 when rounded to the nearest thousandth.
- 5) If the problem specifies that you should include units in your answer, you must include units. If the problem says nothing about units, you do not need to include units, but if you include units, you must include the correct units. The right number with a wrong unit is a **wrong** answer.
- 6) Do **NOT** assume that diagrams are drawn to scale.
- 7) **Compute** all numerical answers unless otherwise specified. For example, if the problem asks for a prime factorization, then your answer should be written as a prime factorization. Otherwise, only the numerical equivalent is acceptable, so do the arithmetic.
- 8) If the problem asks for a specific type of answer, you must give that type of answer. For example, 1.25 is a *decimal*, $\frac{5}{4}$ is a *common fraction*, and $1\frac{1}{4}$ is a *mixed number*. In general, if no particular form is specified, then any form is correct as long as it is simplified.
- 9) Unless the solution specifically requires set notation, don't try to get fancy with set notation unless you are confident that you know what you are doing. Most of the time, whenever we see set notation, it's used incorrectly and is marked wrong.
- 10) If the problem involves solving for a domain or range of a function, you may use either inequalities or interval notation, as long as the values and symbols are correct. If the problem specifies inequalities or interval notation, then you must write your answer in the correct form.

Type of Solution	CORRECT	INCORRECT
Fraction (any type)	$\frac{16}{9}$ OR $1\frac{7}{9}$ OR $1.\bar{7}$	1.7, 1.8, 1.77777777777777 or anything that has been rounded because the answer is an exact fraction. $\frac{80}{45}$ is not simplified.
Radicals	$3\sqrt{2}$	4.24 and 4.242640687 are rounded and are not exact radicals. $\sqrt{18}$ is not simplified.
Rationalizing denominators	$\frac{\sqrt{2}}{2}$	$\frac{1}{\sqrt{2}}$ has a radical in the denominator.
Irrational numbers	2π	6.28, 6.283, or anything that has been rounded. π is π , leave it alone.
Multiple solutions	± 3 OR 3, -3	Both solutions are needed. If you are not sure if you should write "3 and -3" or "3 or -3," use commas to be on the safe side.
Ordered pair	(2, 5)	2, 5 is incorrect. An ordered pair must have parentheses.
Equation	$y = 2x + 1$	$2x + 1$ is incorrect since it does not have $y =$.