

ACCEPTABLE ANSWER FORMATS

Answers must be written in correct mathematical notation. No partial credit will be awarded except on the Power Round. Unless otherwise specified, all answers must be *exact* and *simplified*.

Graders will take a reasonably lenient interpretation of *simplified* based on the following guidelines and examples. Answers that are not *simplified* will be marked as incorrect. The decisions of the ICMT coordinators are final.

Here are some general guidelines for answer simplification. Unless otherwise stated:

- Carry out any reasonable calculations. For instance, you should evaluate any expressions which will take negligible time to evaluate (such as $\frac{1}{2} + \frac{1}{3}$). Unreasonable calculations include large powers (e.g. 7^{27}), large factorials, large products, and trigonometric functions which cannot be expressed in terms of radicals.
- Write rational numbers in lowest terms. Decimals are also acceptable, provided they are exact.
- Move all square factors outside radicals. For example, write $6\sqrt{7}$ instead of $\sqrt{252}$.
- Denominators do *not* need to be rationalized. Both $\frac{\sqrt{2}}{2}$ and $\frac{1}{\sqrt{2}}$ are acceptable.
- Do not express an answer using a repeated sum or product.
- All integrals and derivatives must be evaluated.

Here are some examples of simplified answers, and some examples of unsimplified answers with their simplified equivalents:

Examples of Acceptable Answers	
727	$2^{67} + 1$
$\frac{6}{7}$	$\sqrt{\pi}$
$\frac{1}{3+\sqrt{2}}$	$\frac{\sqrt{2}}{2}$
2026!	$\cos(1)$
$\binom{9001}{1337}$	$11 \sqrt[11]{\frac{27}{4}}$
Examples of Unacceptable Answers	
Unsimplified Answer	Equivalent Simplified Answer
125×31	3875
$\sin\left(\frac{\pi}{7}\right) - \sin\left(\frac{6\pi}{7}\right)$	0
$\sum_{n=1}^{\infty} \frac{(-1)^{n-1}}{n}$	$\ln 2$
$\frac{6}{1434}$	$\frac{1}{239}$
$\sqrt{3 + 2\sqrt{2}}$	$1 + \sqrt{2}$
$\sqrt{\frac{7}{9}}$	$\frac{\sqrt{7}}{3}$
$\sin\left(\frac{\pi}{10}\right)$	$\frac{\sqrt{5}-1}{4}$
$\int_0^{10} x^3 dx$	2500