

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 SMT 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. 7^8), 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 $3\sqrt{7}$ instead of $\sqrt{63}$.
- 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.

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

Examples of Acceptable Answers	
879	$2^{57} + 1$
$\frac{2}{7}$	$\sqrt{\pi}$
$\frac{1}{3+\sqrt{2}}$	$\frac{\sqrt{2}}{2}$
420!	$\cos(1)$
$\binom{200}{4}$	$11 \sqrt[11]{\frac{27}{4}}$

Examples of Unacceptable Answers	
Unsimplified Answer	Equivalent Simplified Answer
61×17	1037
$\sin\left(\frac{\pi}{7}\right) - \sin\left(\frac{6\pi}{7}\right)$	0
$\frac{61}{31415}$	$\frac{1}{515}$
$\sqrt{3 + 2\sqrt{2}}$	$1 + \sqrt{2}$
$\sqrt{\frac{7}{9}}$	$\frac{\sqrt{7}}{3}$
$\sin\left(\frac{\pi}{10}\right)$	$\frac{\sqrt{5}-1}{4}$