

# Forms of Answers

**All answers must be expressed in simplest form.** A “common fraction” means a fraction in the form  $\pm \frac{a}{b}$ , where  $a$  and  $b$  are natural numbers and  $\text{GCF}(a,b) = 1$ .

Examples:

*Problem:* Express 8 divided by 12 as a common fraction.    *Answer:*  $\frac{2}{3}$     *Unacceptable:*  $\frac{4}{6}$

*Problem:* Express 12 divided by 8 as a common fraction.    *Answer:*  $\frac{3}{2}$     *Unacceptable:*  $\frac{12}{8}$ ,  $1\frac{1}{2}$ , 1.5

**Ratios shall be expressed as simplified common fractions unless otherwise specified.**

**Radicals must be simplified.** A simplified radical must satisfy the following:

- 1) Radicands cannot have a factor with the root of the index (e.g., no 4 or 9 factors inside a square root).
- 2) No radicands contain fractions.
- 3) No radicals appear in the denominator of a fraction (e.g.,  $\frac{1}{\sqrt{2}}$  is not allowed;  $\frac{\sqrt{2}}{2}$  is allowed).

Example:

*Problem:* Evaluate  $\sqrt{15} \times \sqrt{5}$ .    *Answer:*  $5\sqrt{3}$     *Unacceptable:*  $\sqrt{75}$

**Dollar amount answers shall be expressed in the form (\$)  $a.bc$ , where  $a$  is an integer and  $b$  and  $c$  are digits.** The only exceptions to this rule are when  $a$  is zero, it may be omitted, or when  $b$  or  $c$  are both zero, they may be omitted. Examples:

*Acceptable:* 2.35, 0.38, .38, 5.00, 5    *Unacceptable:* 4.9, 8.0

**Units of measure are not required in answers, but they must be correct if given.** When a problem asks for an answer expressed in a specific unit of measure, or when a unit of measure is provided in the answer blank, equivalent answers in other units are not acceptable. For example, if a problem asks for the number of ounces and 36 oz is the correct answer, 2 lbs 4 oz will not be accepted. If a problem asks for the number of cents and 25 cents is the correct answer, \$0.25 will not be accepted.

**Do not make approximations for numbers** (e.g.,  $\pi$ ,  $\frac{2}{3}$ ,  $5\sqrt{3}$ ) in the data given or the answer unless the problem says to do so, such as when it says to round to a specific decimal place.

**Do not do any intermediate rounding** (other than what the calculator performs) when calculating solutions. Any rounding should be done at the end of the calculation process, and only when the problem requests it.

**An answer expressed to a greater or lesser degree of accuracy than called for in the problem will not be accepted.** Whole number answers should be expressed in their whole number form.

Thus, 25.0 will not be accepted for 25, and 25 will not be accepted for 25.0.

**The plural form of the units will always be provided in the answer blank, even if the answer appears to require the singular form of the units.**

**Answers must be written on the line after the problem number. Any other blank space may be used as needed to solve the problems, but will be ignored for grading.**

South Bay MOCK MATHCOUNTS is not affiliated with the MATHCOUNTS organization. Still, the South Bay Invitational MOCK MATHCOUNTS Competition is practice in preparation for the Chapter level MATHCOUNTS Competition, so the same rules are used.