Senior Equations[®] Variations

All the Junior variations for this year plus the following:

- **11.** <u>Imaginary</u> | (sideways minus) shall represent the imaginary number *i* (such that $\hat{f} = -1$). | may be placed immediately before or after a numeral without the x sign. When this variation is selected, all roots of a^b , where *a* is a complex number and *b* is a rational number, are available. Each Equation-writer must write *i* in the Equation (Solution and/or Goal) for the Imaginary unit. Note: This variation may be chosen even if no signs (or wild cubes) are in Resources.
- **12.** <u>Decimal in Goal</u> Each Equation-writer may determine where decimal points occur in the Goal. Three consecutive digits may be placed in the Goal, but a decimal point must be placed in front of them, between two of them, or after the third digit in the Goal of any Equation.
- **13.** <u>Log</u> \cdot (sideways \div) represents the log operation. Thus, if *a* and *b* are positive real numbers ($b \neq 1$), $a \cdot b$ equals $\log_b a$.