## Senior Equations® Variations 2018-19

All the Junior variations for this year plus the following:

- 11. <u>Imaginary</u> | (sideways minus) shall represent the imaginary number i (such that l² = -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 Equationwriter 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.** Log ·I· (sideways ÷) represents the log operation. Thus, if a and b are positive real numbers ( $b \neq 1$ ),  $a \cdot I$ · b equals  $\log_b a$ .