

Displaying your equation.

Notice that when you enter an equation for solving in NumSolve, ClassPad displays the variables in the order in which it comes across them in the equation.

Also, the first variable in the list is always initially selected for solving.

More than one solution.

NumSolve will only ever find one solution at a time to an equation, and as a rule of thumb, it will be the 'closest' solution to the set value of the variable.

For example, set $s = 2.5$, $t = 15$ and $b = 10$, select **b** and solve. The solution found is $b = 5$.

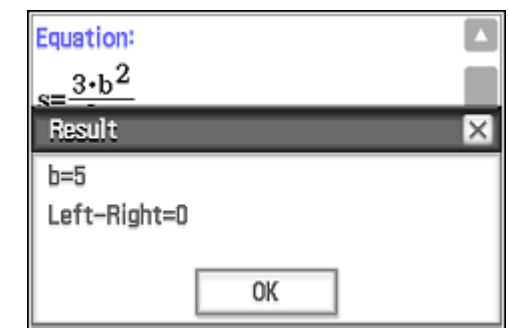
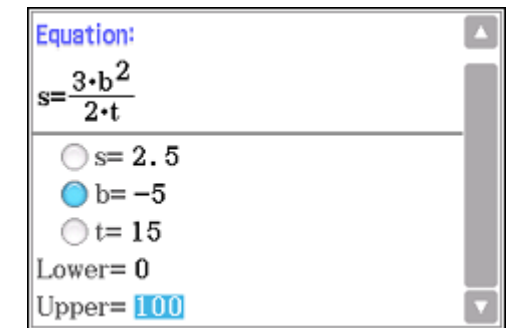
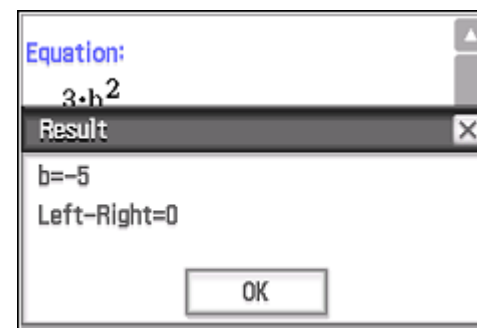
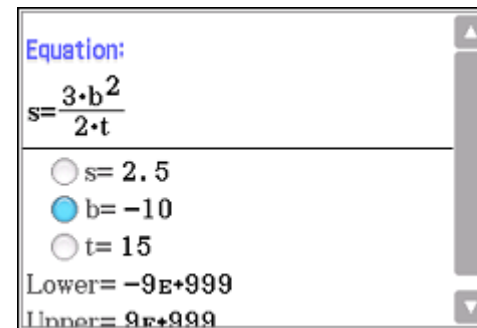
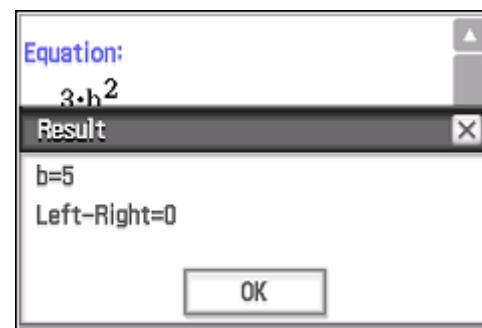
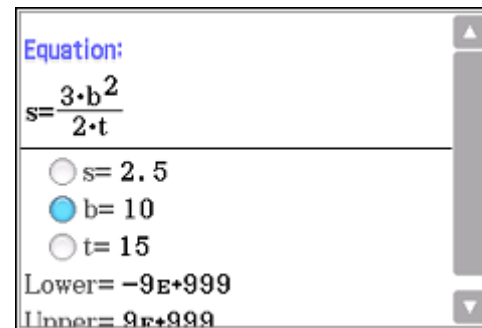
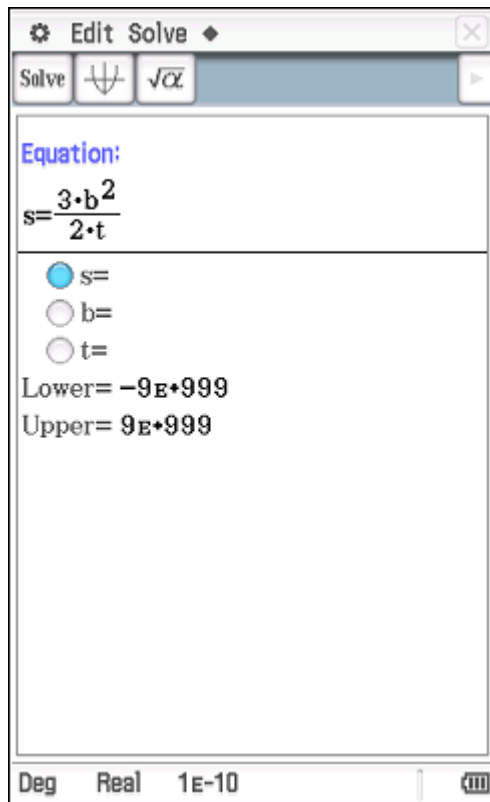
Now set $b = -10$, select **b** and solve.

The solution now found is $b = -5$.

So a handy tip is to always enter a reasonable estimate of the solution for the variable you are solving for before tapping solve.

Restrict the range of solutions.

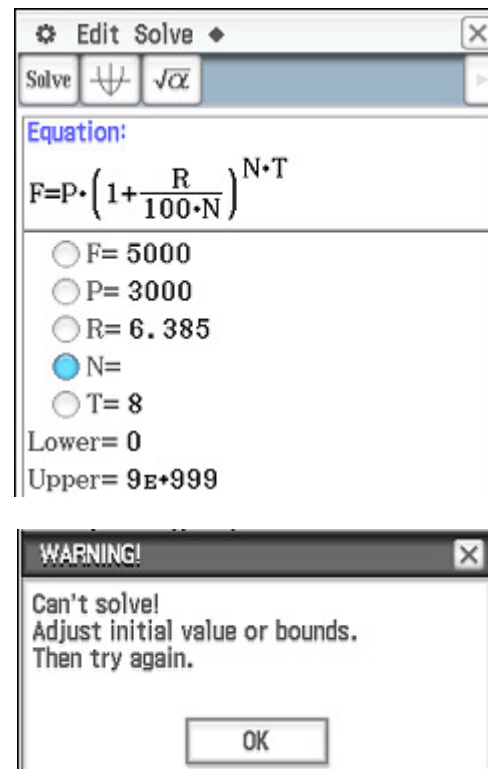
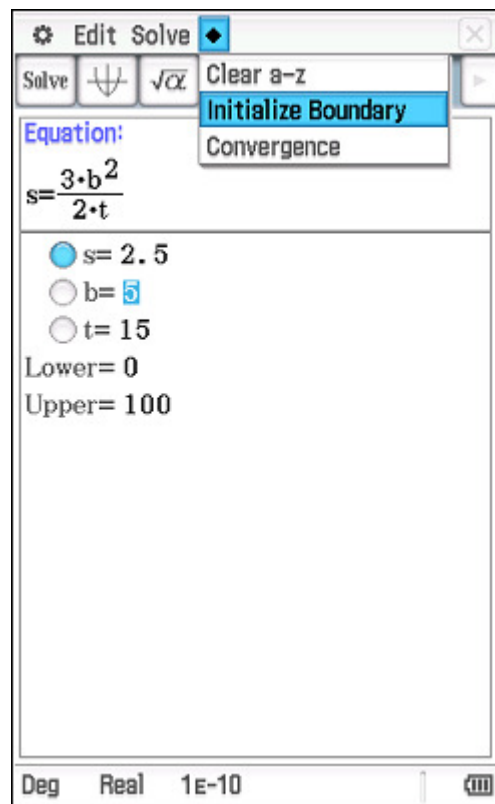
You can restrict the range of solutions returned by setting the values of Lower and Upper. With the settings shown below, the negative solution will not be found.



Quicker solutions. If Classpad is unable to find a solution (shown below), or is taking a long time to solve, it may help to decrease the convergence setting.

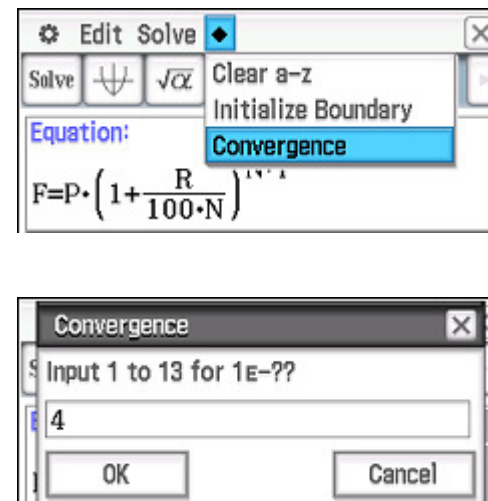
The default setting is shown in the middle of the bottom of the screen and is usually 1×10^{-10} , displayed as **1E-10**.

To reset the range for Lower and Upper, tap \blacklozenge followed by **Initialize Boundary**.



To change the convergence tap \blacklozenge followed by **Convergence**.

The convergence window opens and a new value can be set.



A solution is returned, which is always worth checking for validity.

