

Use of brackets in functions

One problem commonly encountered by new users is misinterpretation of brackets. The hp calculator will correctly interpret $F1(X) = X^2(X+1)$ as $X^{2*(X+1)}$ but will not understand $F(X)=X(X+1)$. When used in either Function or Solve, it will result in the error message of “Invalid User Function”.

Similarly if you want to use the sum to n terms formula for a GP in the Solve aplet and enter it as $S=A(1-R^N)/(1-R)$ then you will see a similar message unless you change it to read $S=A*(1-R^N)/(1-R)$.

The reason for this apparent ‘error’ is that all of the built-in functions such as $SIN(\dots)$ and $COS(\dots)$ and $ROUND(\dots)$ work with brackets. When the calculator encounters $X(X+1)$ it interprets this as asking it to evaluate a function called $X(\dots)$ at the value $X+1$. Since there is no such function it returns the error message that you are trying to use a function that is unknown.

The solution is simple: just remember to put the * sign in when you use letters immediately before a bracket.

