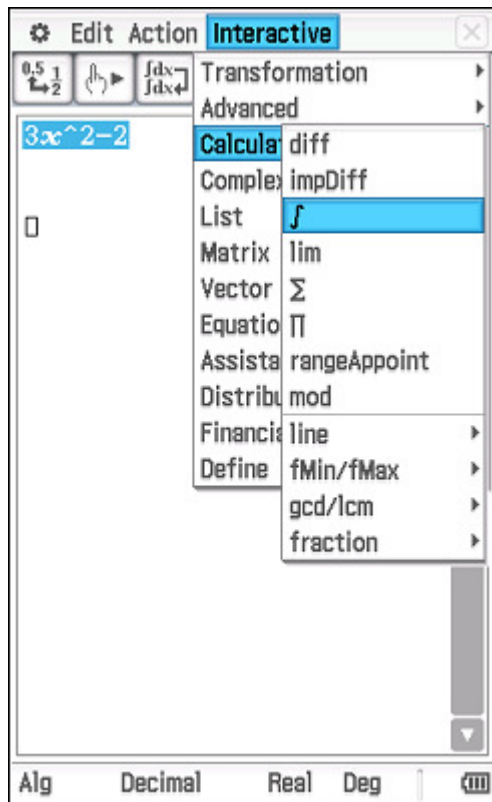


Enter the expression  $3x^2 - 2$  and tap EXE.

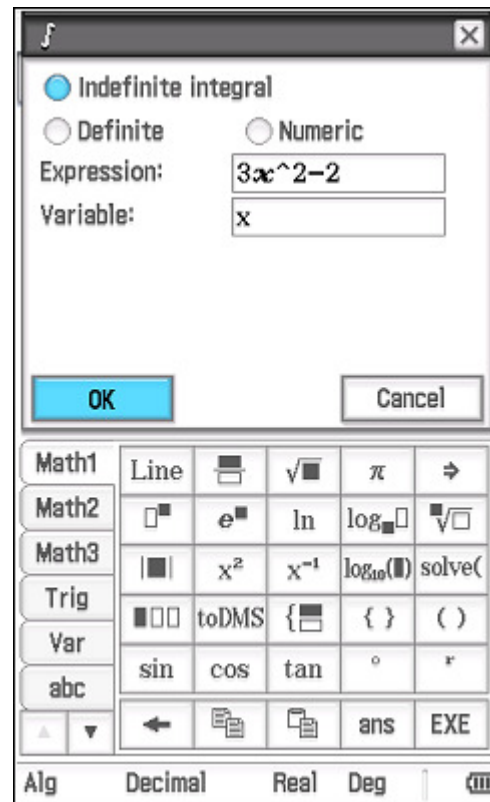
Select the expression.

Tap **Interactive**, **Calculation**,  $\int$ .



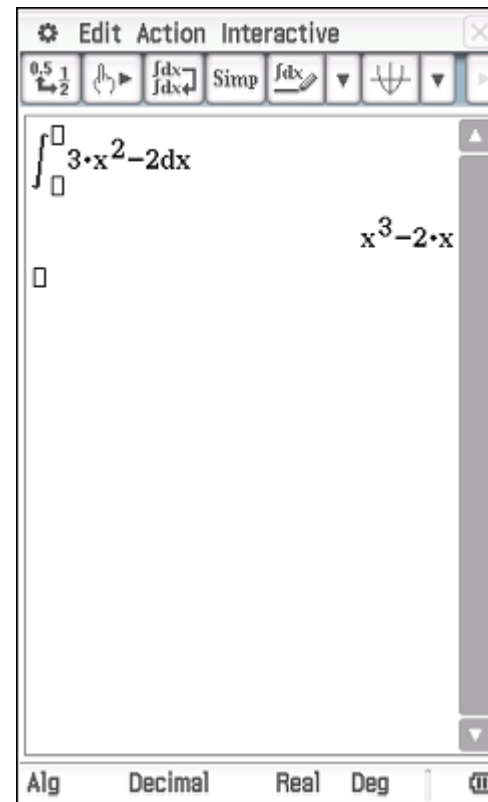
The  $\int$  dialogue box opens.

For an indefinite integral with respect to  $x$ , simply tap **OK**.



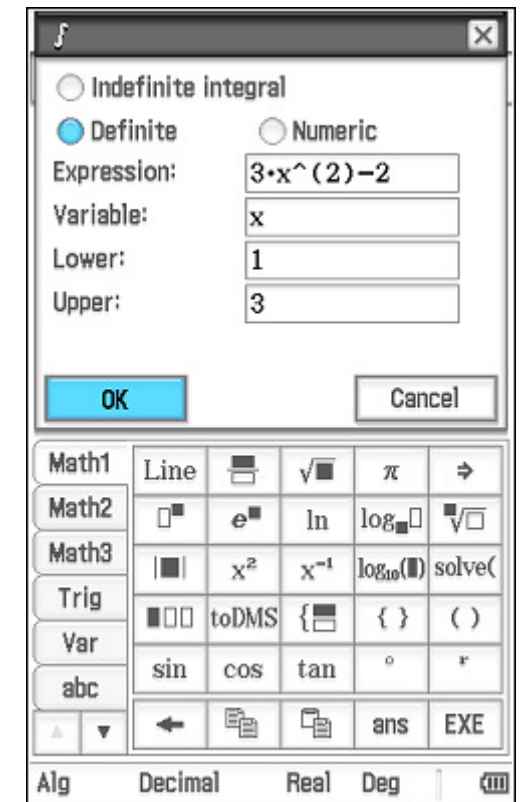
Classpad completes the syntax and returns the indefinite integral.

*Note that you still need to remember to add the constant of integration.*



For a definite integral with respect to  $x$  tap the **Definite** button and enter the limits of integration (use 1 as the lower and 3 as the upper).

Tap **OK**.



Classpad completes the syntax and returns the value of the definite integral.

To speed up definite integrals that take a long time, you may choose to evaluate them numerically – select the Numeric option in the integration window (you may also choose to lower the tolerance setting).

An integration template can be found on the Main2 keyboard.

Integration with respect to any variable is possible.

ClassPad II calculator interface showing the integration of  $3x^2 - 2x$ . The screen displays the indefinite integral  $x^3 - 2x$  and the definite integral  $\int_1^3 3x^2 - 2x dx = 22$ .

Integration window settings for the definite integral. The 'Numeric' option is selected. The expression is  $3x^{(2)}-2$ , the variable is  $x$ , the lower limit is  $1$ , and the upper limit is  $3$ . The tolerance is set to  $1E-5$ .

ClassPad II calculator interface showing the integration of  $3x^2 - 2x$  with the 'Numeric' option selected. The screen displays the indefinite integral  $x^3 - 2x$  and the definite integral  $\int_1^3 3x^2 - 2x dx = 22$ .

ClassPad II calculator interface showing the integration of  $t+2dt$ . The screen displays the indefinite integral  $0.5t^2 + 2t$  and the definite integral  $\int_1^3 t+2dt = 22$ .