

Many math problems have multiple steps in their solution. When these steps are always the same, an eActivity can be programmed to quickly solve such problems.

In this example, Herons method to find the area of a triangle when three side lengths are known is used.


The first step is to find the semi-perimeter $s = \frac{a+b+c}{2}$.

Then the area is given by $A = \sqrt{s(s-a)(s-b)(s-c)}$.

Start a new eActivity and open the keyboard on the **abc** tab.

Enter the first line shown and tap **EXE**.



Tap the  icon to change from text to math mode.


Tap the **math** tab, complete the next line and tap **EXE**.

This line stores the numbers 3, 4 and 5 into the variables a , b and c , where these are the side lengths of the required triangle.

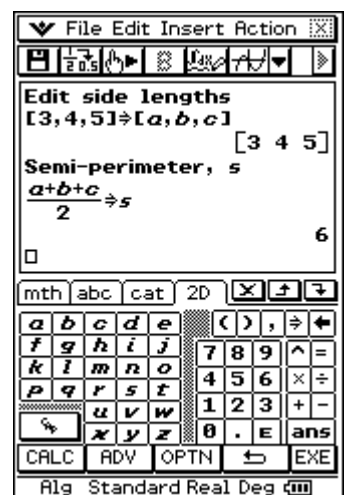


Tap the  icon to change back to text mode.


Enter 'Semi-perimeter, s' and tap **EXE**.

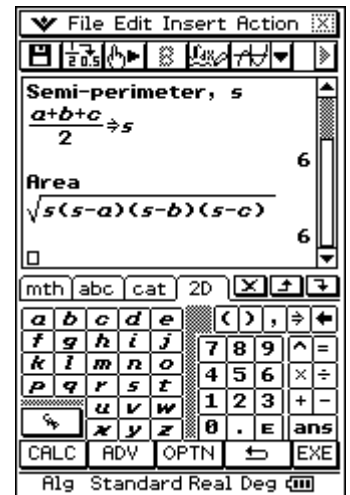
Tap the  icon to change to math mode.

Enter the expression shown and tap **EXE**.



Repeat the previous steps to calculate the area.

Take care to use the  icon to set up each line for either text or math.



Tap **File, Save As**.

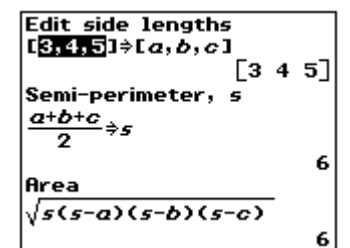
Enter a suitable name and tap **Save**.



Return to the top of the eActivity and change the three side lengths. In the example shown we have chosen 6, 8 and 13.

Tap **EXE** while still on this line.

The semi-perimeter and area are both re-calculated.



Try some other values that might represent the side lengths of a triangle.

After tapping **EXE** at the top of an eActivity, Classpad 'cascades' down the screen, updating intermediate math results and ignoring text lines.

