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771	Find Transformation Matrix	Author	Charlie Watson
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		CPM OS	**03.04.4000**

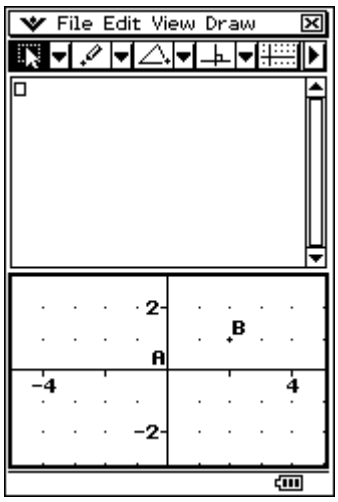
Start in Main.

Determine the matrix representing a clockwise 90° rotation about the origin.

Open a Geometry window from Main, add axes and integer grid.

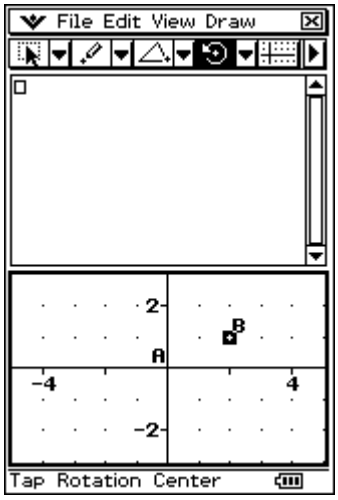
Select the point tool and add a point at A(0, 0) and at B(2, 1).

Tap on the **select** tool.



Tap on B to select it.

Tap **Draw, Construct, Rotation**.

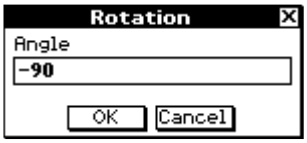


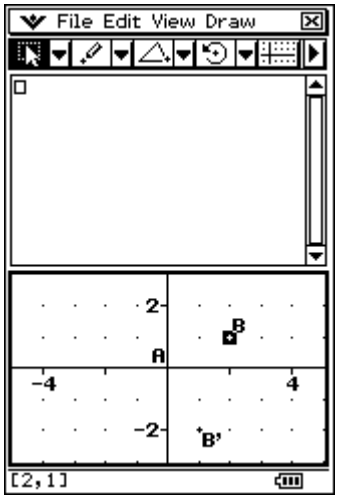
Tap on the rotation centre, A.

The Rotation box opens.

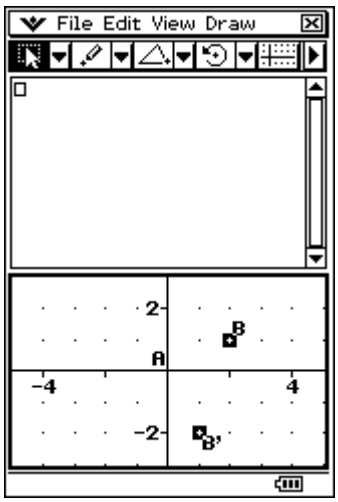
Enter -90 and tap **OK**.

The image is plotted at B'(1, -2).





Tap onto B' so that now both image and object are selected.

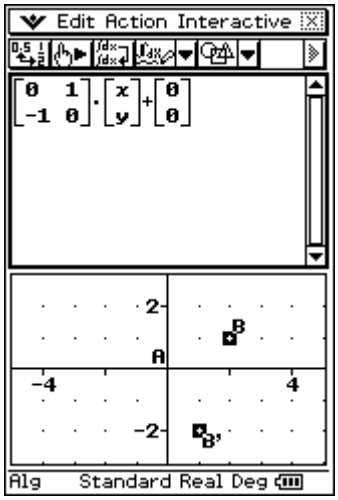


Tap back onto B and drag the points into the cursor box in Main.

Release the pointer.

The matrix transformation is displayed.

Even though no translation was applied, by default Classpad still adds a translation of $\begin{bmatrix} 0 \\ 0 \end{bmatrix}$ *after the matrix product.*



Tap **EXE** to see the mapping.

$x \rightarrow y$

$y \rightarrow -x$