CALCULATOR INSTRUCTIONS

Chapter 1

Example 5

TI-Nspire CX

Make sure that your calculator is set to degrees.

Open a Calculator page and press ctrl and (. Enter the difference in the x-coordinates and the difference in y-coordinates separated by a comma (,). The square brackets denotes that this is a vector.

Place the cursor to the right of the square brackets and press menu. Select 7: Matrix & Vector, C: Vector and 4: Convert to Polar and press enter. The polar form of **d** is then displayed.

Example 6

TI-Nspire CX

Open a Calculator page and press ctrl and (. Enter the norm of the vector and the angle that **d** makes with the x-axis separated by a comma. To enter the angle, press ctrl and select the angle symbol. There is no need for the degree symbol.

Place the cursor to the right of the square brackets and press menu. Select 7: Matrix & Vector, C: Vector and 5: Convert to Rectangular and press enter. The Cartesian form of **d** is then displayed.

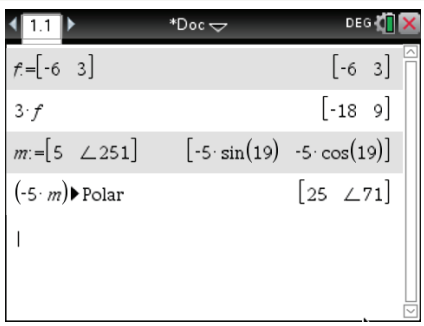
Example 8

TI-Nspire CX

Enter vector **f** as previously explained.

Calculate $3 \times \mathbf{f}$ in the usual way.

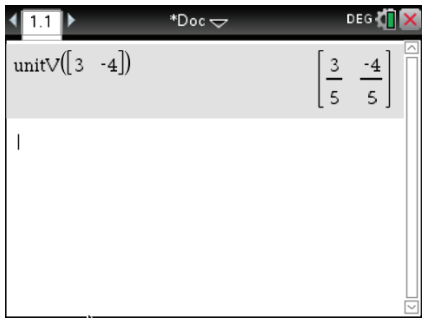
Enter vector **m** as previously explained for vectors in polar form. Calculate $-5 \times \mathbf{m}$ and convert the result to polar form as shown.



Example 14

TI-Nspire CX

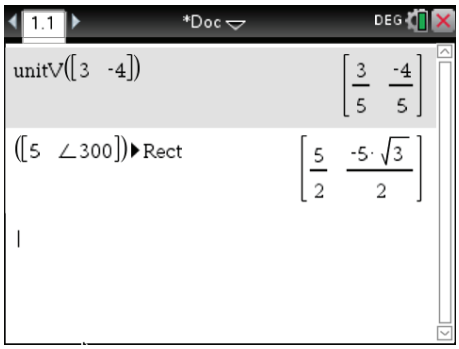
For a vector in component form, e.g., (3, –4), press menu, and select 7: Matrix & Vector, C: Vector and 1: Unit Vector. Enter the vector as described in Example 8. Press enter to display the unit vector.



Example 15

TI-Nspire CX

For a vector in polar form, e.g., (5, 300°), enter as previously described in Example 8 then press menu, and select 7: Matrix & Vector, C: Vector and 5: Convert to rectangular. Press enter to display the vector in component (rectangular) form.



Example 17

TI-Nspire CX

You first need to define the vectors.

To define **p**, press P and then press ctrl and enter the vector as previously explained. Press enter to display the vector. Define **q** in the same way.

To find **q** – **p**, press Q − P and press enter to display the result.

To find 3**p** – 5**q**, press 3 × P − 5 × Q and press enter to display the result.