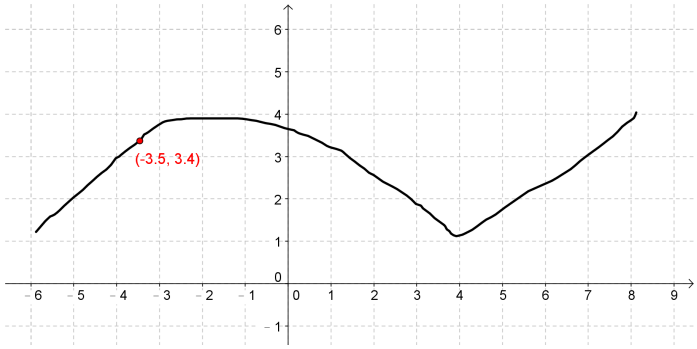
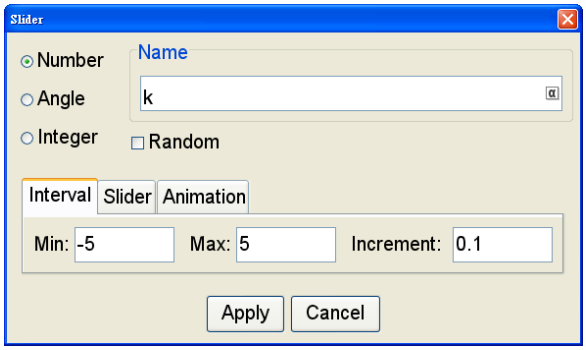
GeoGebra Tutorial: **Transformation of Functions**

1. Select the freehand shape tool  , draw an arbitrary function f.

2. Select the function inspector tool  . Click f(x) in Algebra view. Choose "Point" tab. Select  and enter 1 in "Step". Drag the red point on the graph. Delete it when it's not needed.

3. Create a point on f.





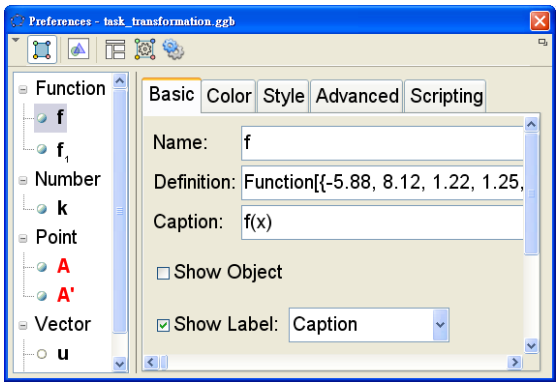
4. Use the slider tool  to create a slider k with value from -5 to 5.

5. Input: `u=Vector[(k,0)]`. Hide this vector.

6. Select the translation tool  . Click the point A and then the vector u. You should get the image A'.

7. Select the translation tool  again. Click the function f and then the vector u. You should get the image f_1.

8. Set and show the caption of f and f_1 as shown.



9. Use the vector tool  to create another vector v.

10. Make some decorations as you like.