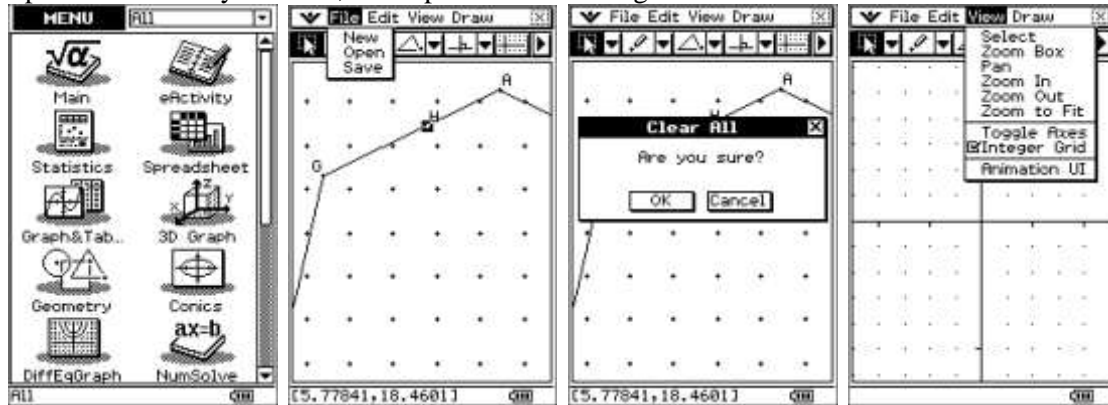


Mobile geometrical art

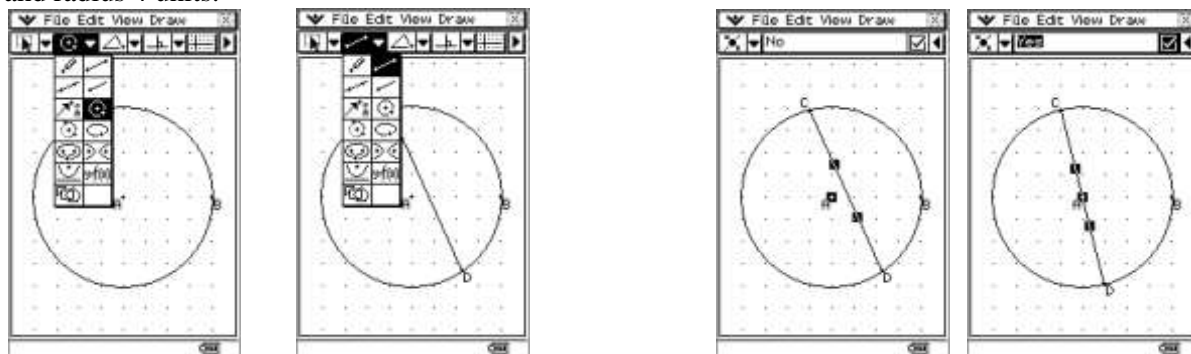
This resource was written by Derek Smith with the support of CASIO New Zealand. It may be freely distributed but remains the intellectual property of the author and CASIO.

Using the 'Animate' feature in the Geometry icon, you can create geometrical and functions that 'move'. Open the Geometry window, then open a new working screen.



Turn the Integer-grid on (if it is not).

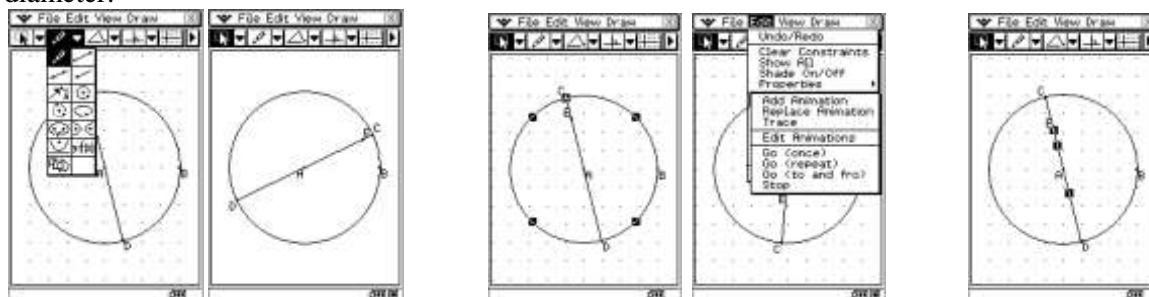
Create a circle centre (0,0) and radius 4 units.



Draw a line segment starting and finishing on the circumference.

Tap on 'A' and the line CD. Snap this to the centre of the circle, tick the box on the top right (is now a diameter and will not move away from the centre of the circle).

Place a point on the diameter.

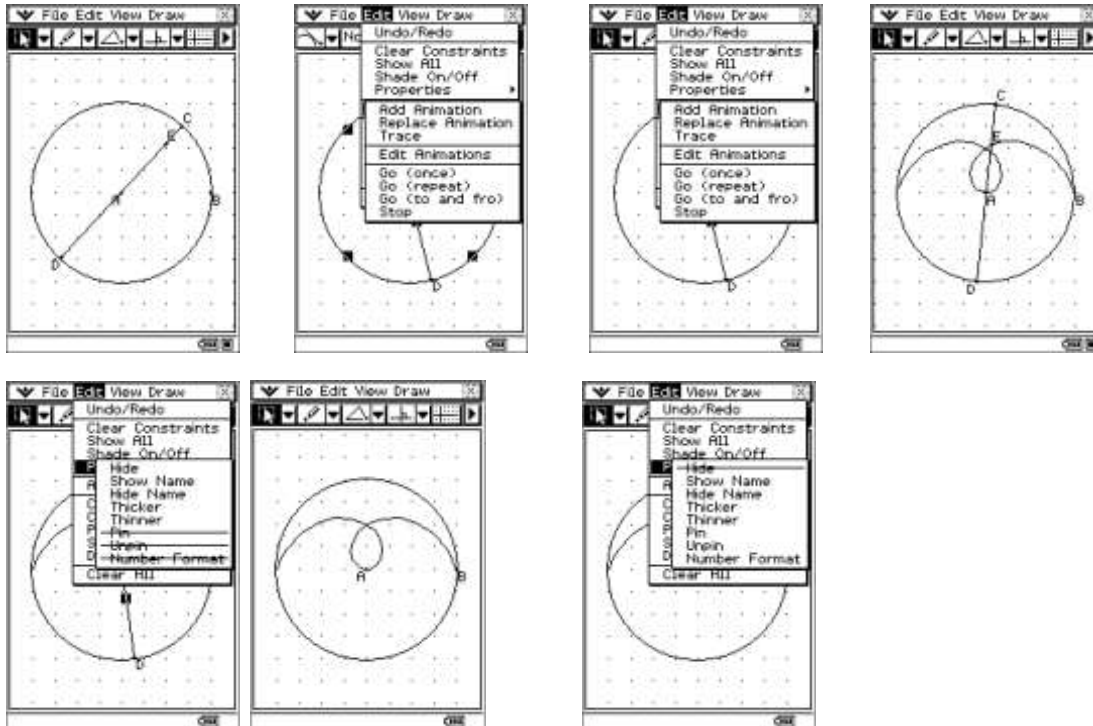


Tap on the point C and the circle, then 'Add animation'. Check to see that the animation works.

Now, tap on the line and the point, then 'Add animation'. Check to see that the animation works.

Tap on the point, select 'Edit' and 'Trace'.

Select 'Edit' and the 'Go (once)' or 'Go (repeat)' or 'Go (to and fro)' to capture the image (see below) as the diameter rotates and the point on the line moves from one end to the other.

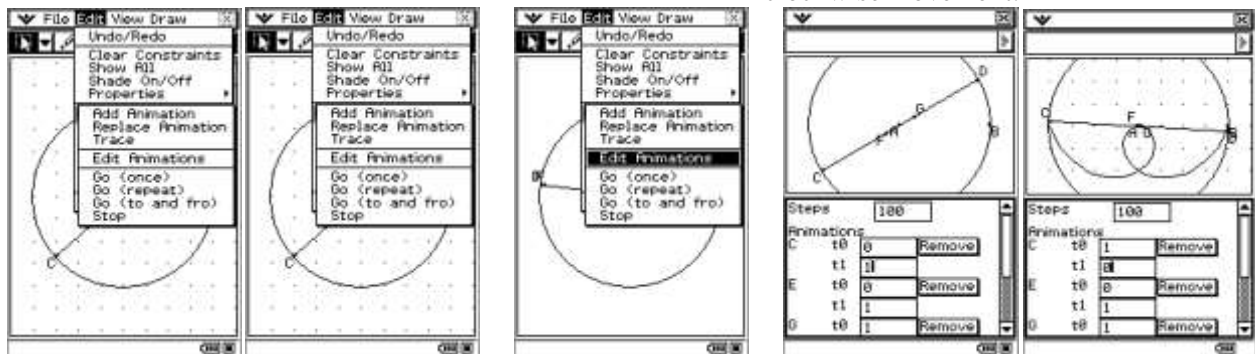


You can 'Hide' the construction.

Show the construction again.

Editing animations that you have created. The default is t0:0 and t1:1, an anticlockwise movement.

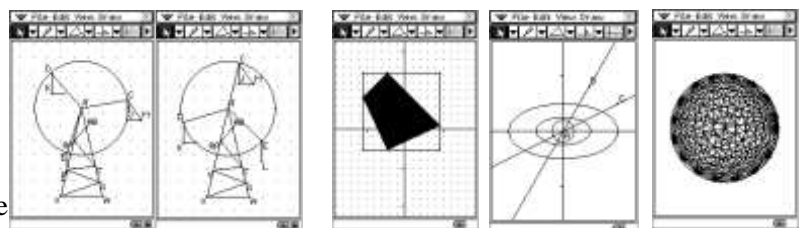
Overtyping t0:1 and t1:0 will construct an clockwise movement.



Challenges:

Can you construct:

1. A balloon floating upwards
2. An engine piston
3. A ferris wheel
4. A car that moves across the screen
5. The solar system
6. A moving rectangle inside a square
7. ...



For further tips, more helpful information and software support visit our websites:

www.casio.edu.monacocorp.co.nz or <http://graphic-technologies.co.nz>