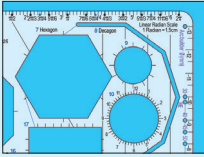
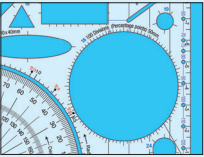


Special MATHOMAT features



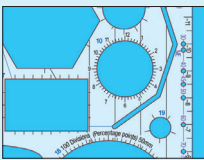
A number line (right-hand edge)

Positive and negative integers for addition and subtraction (for example $+3 + -8$). This edge can also be used for the quick drawing of axes of graphs.



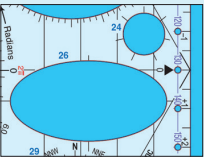
Circle chart (shape 18)

The circumference of this circle has been divided into 100 equal parts and is ideal for quickly representing percentages, particularly in relation to displaying statistical information in the form of a circle chart or pie graph.



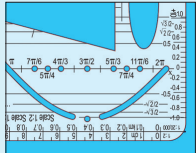
Clock face (shape 10)

This circle has been marked to represent the 60 divisions of a clock face. You can use it for clock drawings to show different times of the day. It is also useful for marking any circle evenly with divisions that are factors of 60.



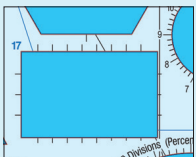
Boxing the compass (shape 29)

This circle shows the 16 main points of the compass. See how the points relate to bearings and the importance of finding north.



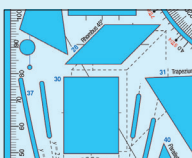
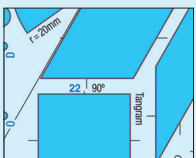
Scale ruler (bottom edge)

This has the scale 1: 20 000 (1 centimetre on a map equals 200 metres on the ground for example 5 cm represents 1 km). This is a commonly used street directory scale. See "First there". Also, a 1:2 scale for detailed drawings.



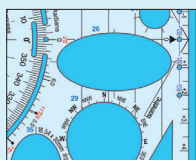
Golden rectangle (shape 17)

The ratio of this special rectangle (shape 17 on your Mathomat V7) is used in art and architecture as well as being linked to the *Fibonacci numbers*.



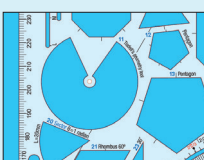
Prism clusters

Shape clusters for sketching square and rectangular based prisms.



One set of isometric lines (in each quarter)

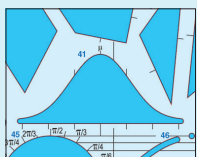
One of the isometric guides can be found running through shape 30 with three more from the other sides. They enable the drawing of an isometric grid, used for producing technical sides and architectural drawings that give the effect of perspective while preserving measurements.



Tisdell's geometry tool

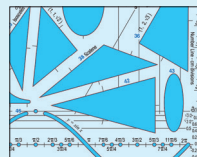
Tisdell's geometry tool (TGT). Professor Tisdell's new geometry tool makes geometric construction with the Mathomat straight edge fast and accurate. It also continues to work well as a 40mm diameter circle. Use the TGT with construction activities on the MAC.

Also for Version 7:



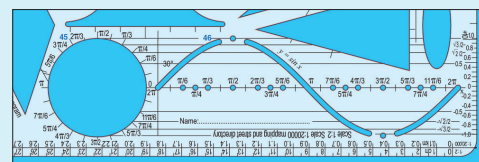
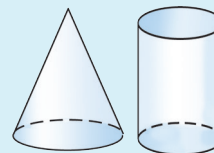
Normal frequency curve (shape 41)

The powerful concept of normal distribution stemming from the central limit theorem is important in the study of probability and statistics. Normal distribution curves can be represented quickly and accurately with Mathomat V7.



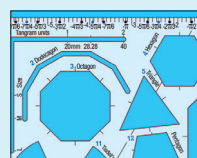
Enhanced 3-D sketching for solids

Shapes in Mathomat can be used for quick, intuit sketching of useful 3-D solids for surface area and volume calculations. Shapes 30 & 39 cylinder, 42 & 43 cone as well as new kite, 27, for square based pyramids.



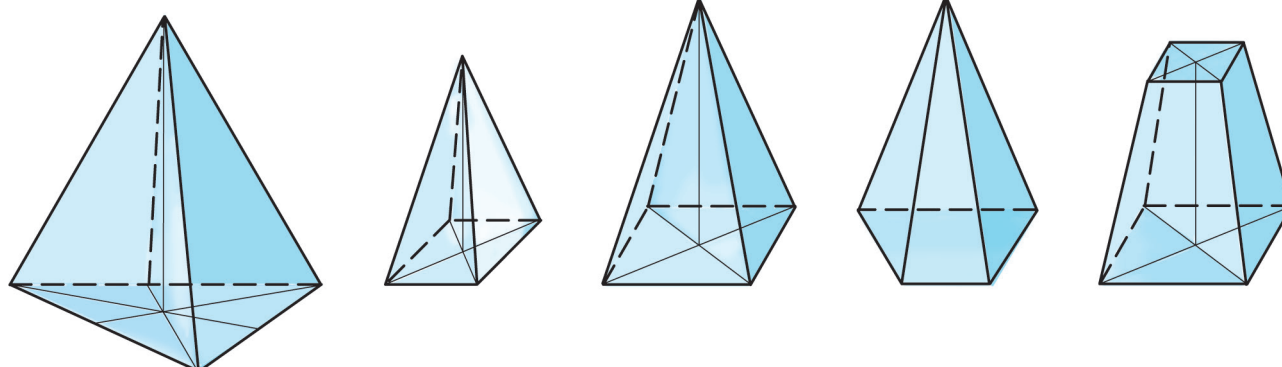
Trig graph cluster

linear radian scale, 30mm diameter unit circle, enlarged sine curve and y-axis output scale showing sine as height above x-axis. For neat sketching of function of $y = \sin x$ for trig graphing and problem solving.



Enhanced 2-D pattern drawings

Two sets of quadrilaterals and regular polygons with matched sides for creative tessellations and other 2-D patterns. Small (10mm side lengths) and large (15mm sides). Large set now includes regular pentagon, octagon, hexagon and dodecagon.



Use your Mathomat to try out 3-D sketching (see these and more examples on MAC 11.2 page 2)