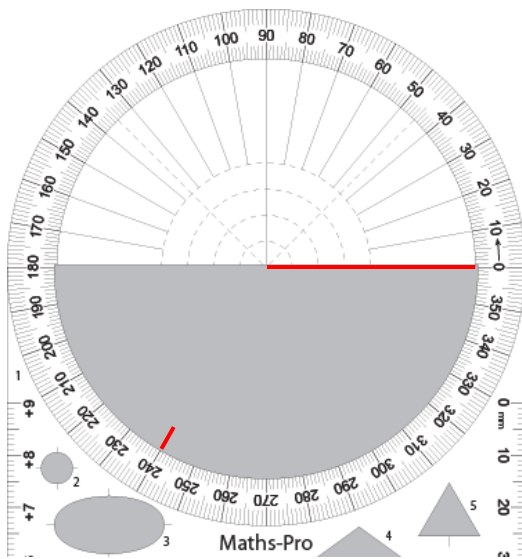
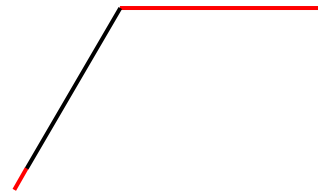


1 Easy angle marking.

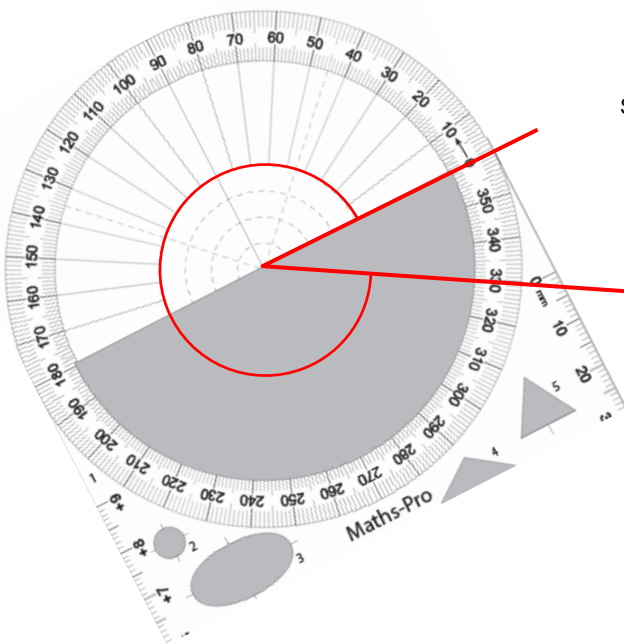


Rule base line and mark angle position.



Rule to join segments.

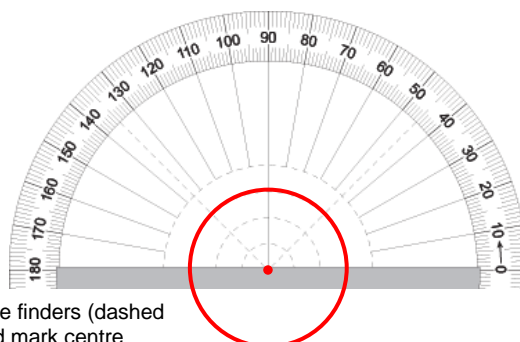
2 Easy angle measurement.



Start at zero and follow small black arrow in direction of angle.

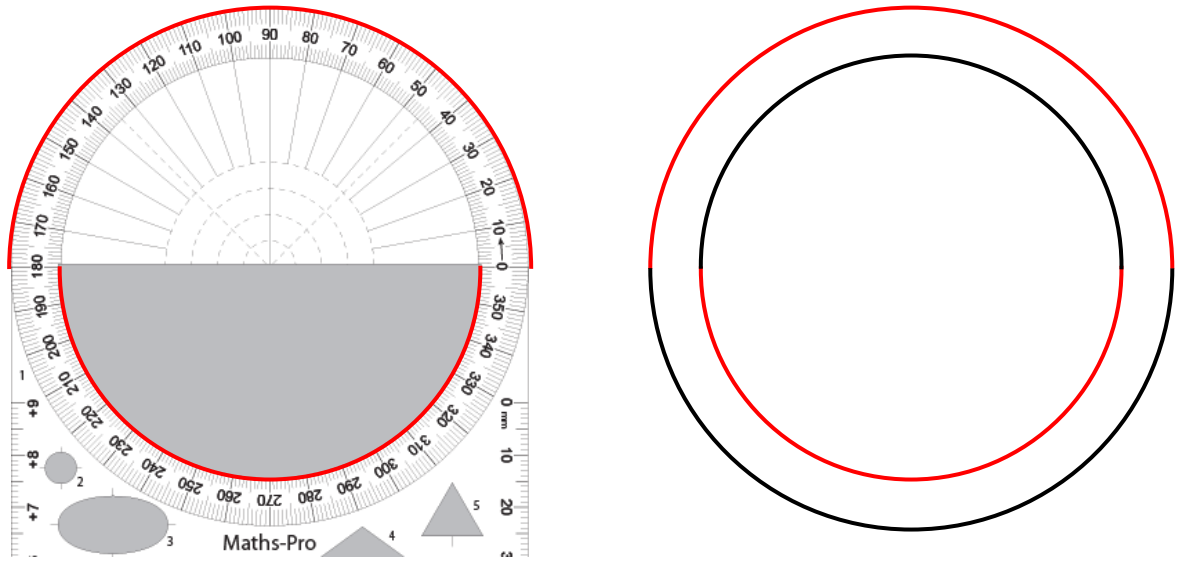
Note value on other angle arm.

3 Find the centre of a circle.

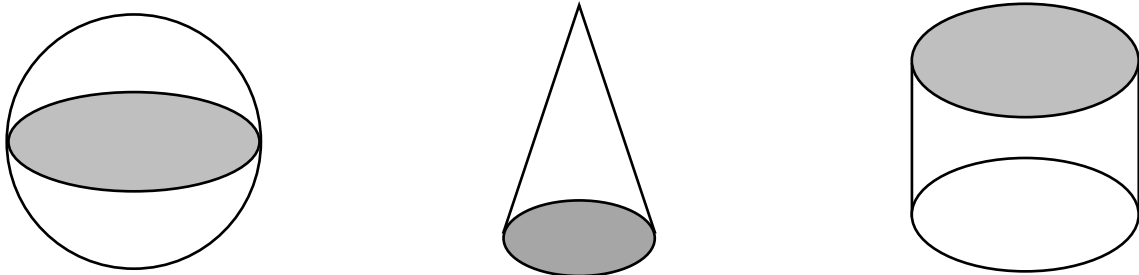


Use circle centre finders (dashed curves) and mark centre

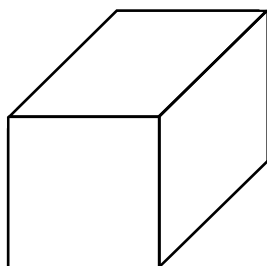
4 Draw large circles – 8 cm and 10 cm diameter by joining two semi circles.



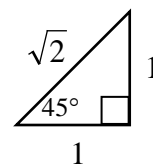
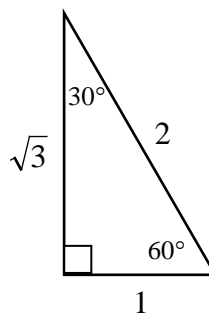
5 Combine ellipses with circles, triangles and rectangles to form spheres, cones and cylinders.



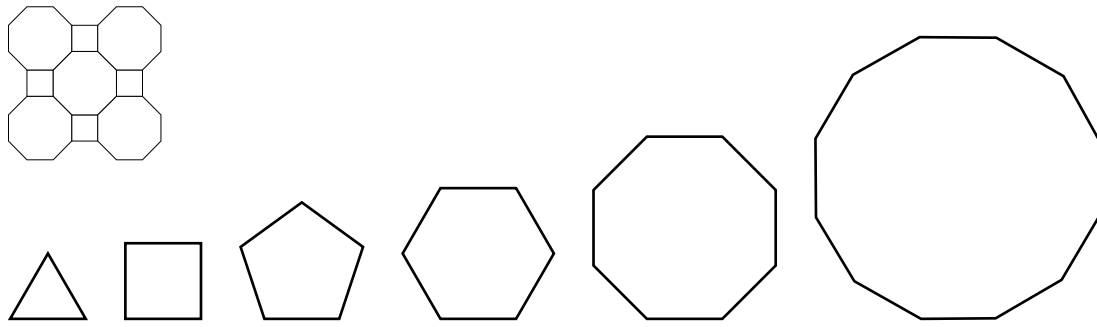
6 Rhombus (x 2) and square used to draw 3D prism.



7 Special triangles for common trig ratios.

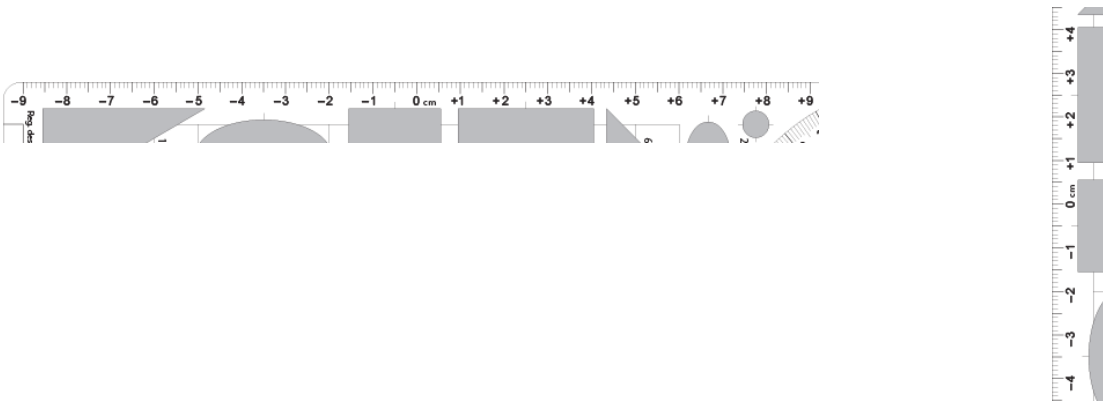


8 Regular polygons of side length 1 cm for tessellation investigation.

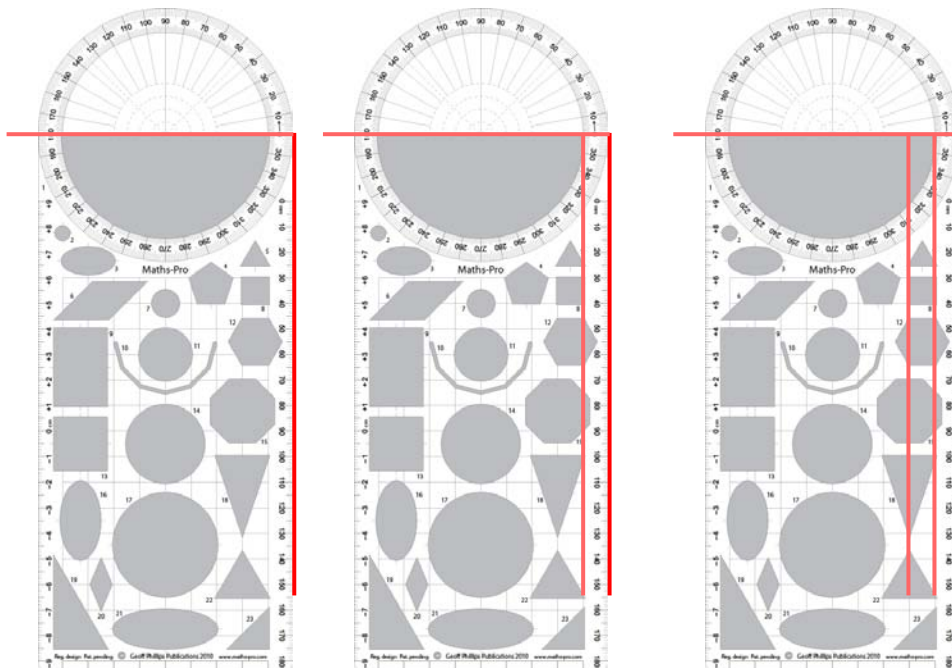


9 Number line.

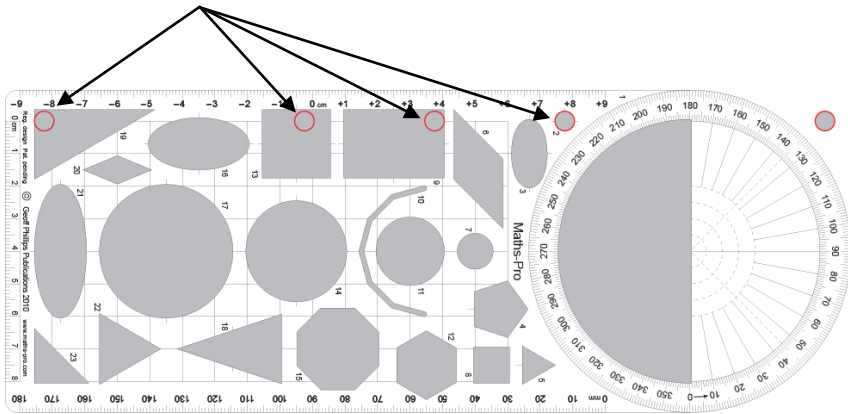
Use horizontally (left = negative, right = positive) or vertically (up = positive, down = negative).



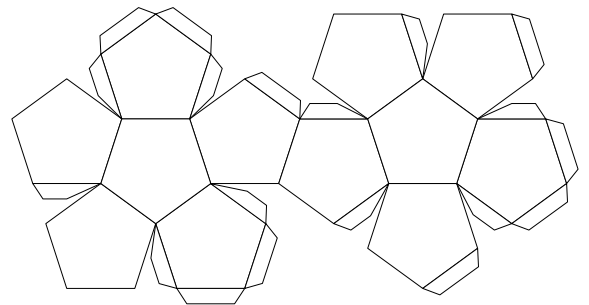
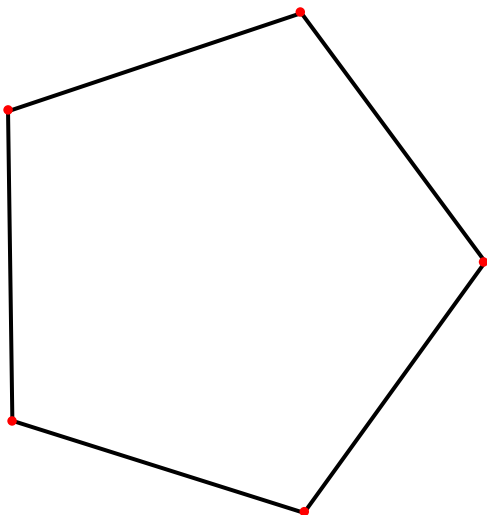
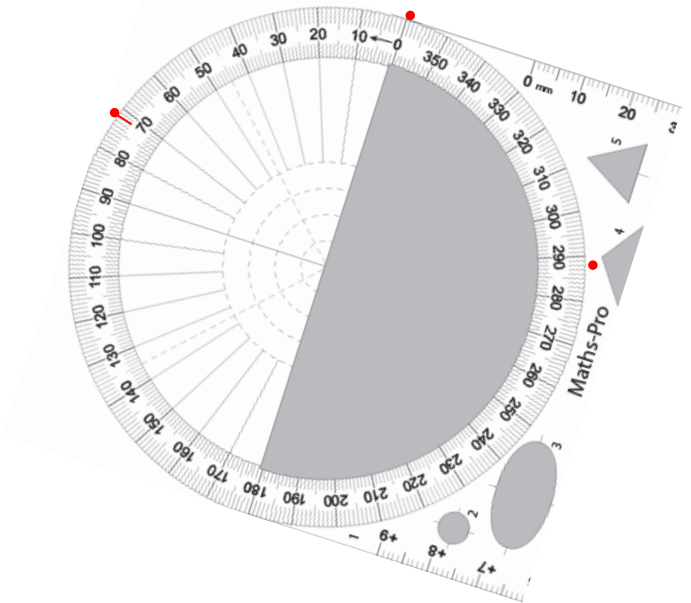
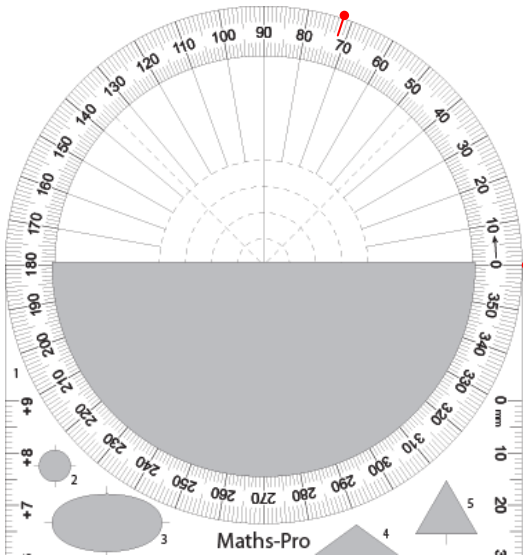
10 Grid overlay aids construction of parallel and perpendicular lines.



- 11 Shapes numbered for easy reference (see also table in section 15).
- 12 Clips into 2, 3 or 4 ring binders.



- 13 Large polygon designs using protractor. e.g. for a pentagon, mark every  $72^\circ$  around the protractor.

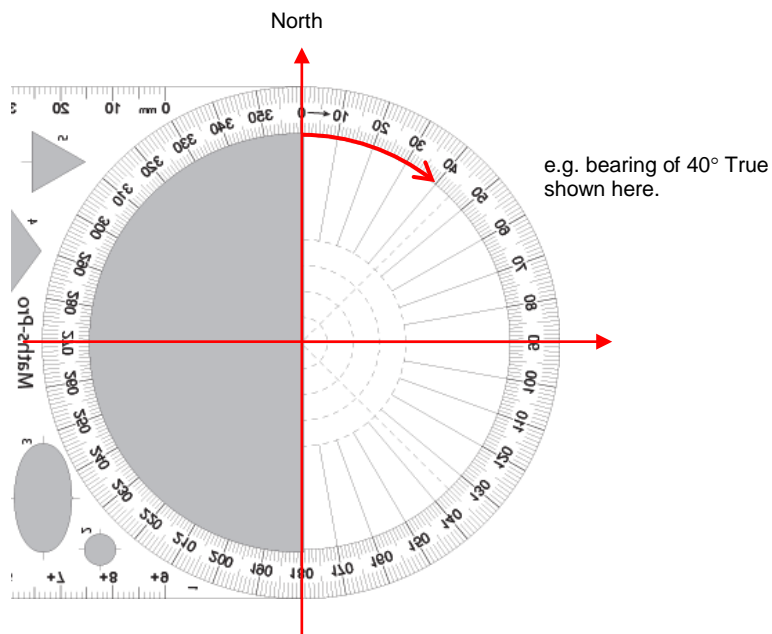


Trace the first shape several times to draw a complete net for a polyhedron. (Add tabs if required.)

## 14 Bearings.

Flip Maths-Pro over and point 0° to top.

Numbers will be mirrored, but bearings will now be easily determined.



## 15 Shapes listing

Shape	Name	Dimensions / side length / diameter
1	Semi circle	80 mm × 40 mm
2	Circle 1	5 mm
3	Ellipse 1	20 mm × 10 mm
4	Pentagon	10 mm
5	Equilateral triangle 1	10 mm
6	Rhombus 1	20 mm
7	Circle 2	10 mm
8	Square 1	10 mm
9	Rectangle	20 mm × 30 mm
10	Half dodecagon	10 mm
11	Circle 3	20 mm
12	Hexagon	10 mm
13	Square 2	20 mm
14	Circle 4	30 mm
15	Octagon	10 mm
16	Ellipse 2	15 mm × 30 mm
17	Circle 5	40 mm
18	Isosceles triangle	20 mm × 30 mm
19	Right angle triangle 1	20 mm base, side ratios (1, 2, $\sqrt{3}$ )
20	Rhombus 2	10 mm
21	Ellipse 3	40 mm × 15 mm
22	Equilateral triangle 2	20 mm
23	Right angle triangle 2	15 mm × 15 mm, side ratios: (1, 1, $\sqrt{2}$ )