

Tessellation

An arrangement of shapes fitted together, especially of polygons in a repeated pattern without gaps or overlapping.



Year 9 foundation topic 6

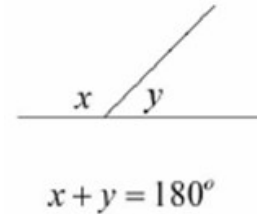
Angles

What careers would use these skills?

Urban and regional planners, surveying engineers, architects, cartographer (for drawing maps)

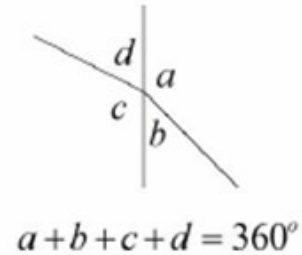
Angles on a straight line

Angles on a straight line add up to 180° .



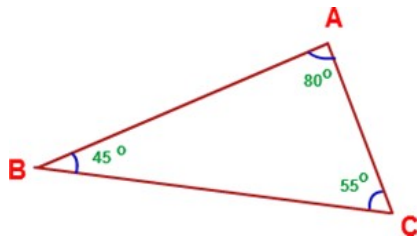
Angles at a point

Angles at a point add up to 360° .



Angles in a triangle

Angles in a triangle add up to 180° .

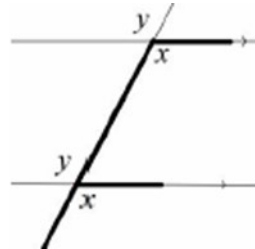
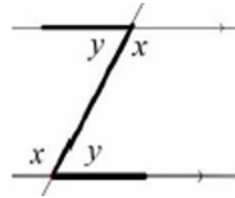


Equilateral triangles have angles of 60° .

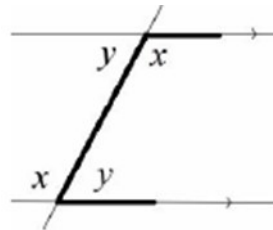
Angles in parallel lines

Alternate angles are equal.

They look like a Z (but don't say that in an exam!)

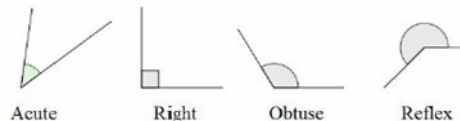


Corresponding angles are equal. They look like F angles, but never say this in the exam.



Co-interior angles add up to 180° . They look like C angles, but never say this in the exam.

Don't forget about the 4 different types of angle:



Interior angles

Sum of interior angles = (number of sides $- 2$) $\times 180$

Eg. For a decagon

$$(10 - 2) \times 180 = \underline{1440^\circ}$$

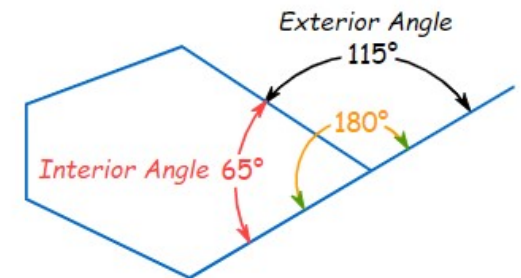
So one interior angle of a decagon is $1440 \div 10 = \underline{144^\circ}$

Exterior angles

Size of one exterior angle = $360 \div \text{number of sides}$

Eg. An exterior angle of a regular octagon

$$360 \div 8 = \underline{45^\circ}$$



Interior + exterior = 180°