

SUBJECT: **Angles – basics**

KEY-WORDS: angles, acute, obtuse, reflex, protractor

LINK-WORDS: clockwise, anti-clockwise, PAIRS OF ANGLES

NOTES

An angle is a measure of turn, shown by two lines meeting at a point. The length of the arms is not important.

A full turn is cut into 360 degrees – noted as 360°

Angles are classified according to a range of sizes – less than 90° are called ACUTE
 - between 90° and 180° are called OBTUSE
 - greater than 180° are called REFLEX.

Exactly 90° is called a right-angle (shown with a square).

180° is called a straight-angle or half-turn.

360° is called a full turn.

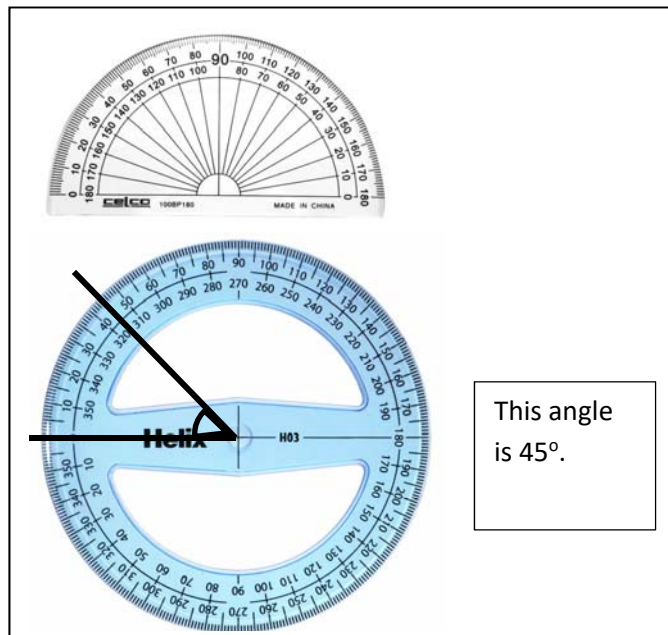
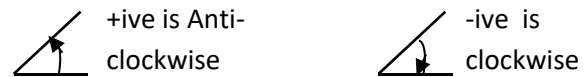
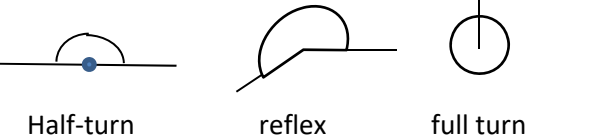
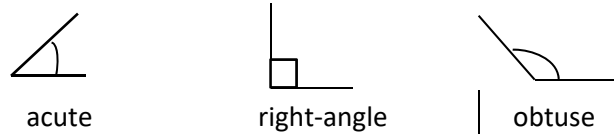
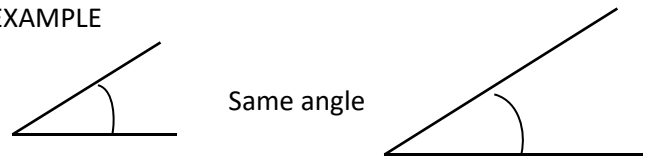
Angles can be positive or negative depending on which way they turn, but opposite to the clock –

Angles are measured using a PROTRACTOR, by placing the centre cross on the vertex (point) and the 0 (zero) line on one of the arms. Then measure clockwise or anti-clockwise following the curve to the other arm. Read the OUTSIDE numbers if going clockwise and the INSIDE numbers if going anti-clockwise.

Protractors can be a half-turn or a full-turn version. The full-turn is best, but can break easily in your bag!

The method to draw angles is similar.
 Draw your zero-line first
 then follow the numbers to your required angle,
 Put a dash -and join them up!

EXAMPLE



DO's
 Do make sure the arms are long enough to read.

DON'Ts
 Don't read the wrong number – check your answer makes sense by thinking of the CATEGORY from above.

RELEVANT SUBJECTS
 Bearings on maps – geography. Drawing shapes, scale-drawings in materials etc.

EXAMPLES and LINKS
<https://www.mathsisfun.com/geometry/protractor-using.html>