

Constructing Obtuse Angles

In order to construct an obtuse angle, we can construct an acute angle first on a straight line then subtract from 180 to get the obtuse angle. For example; In order to construct the obtuse angle of 135° , we construct an acute angle of 45° on a straight line. The adjacent angle to the 45° will then be the obtuse angle of size 135° . Note we can construct the following obtuse angles;

$$180^\circ - 90^\circ = 90^\circ$$

$$180^\circ - 45^\circ = 135^\circ$$

$$180^\circ - 22.5^\circ = 157.5^\circ$$

$$180^\circ - 11.25^\circ = 168.75^\circ$$

$$180^\circ - 60^\circ = 120^\circ$$

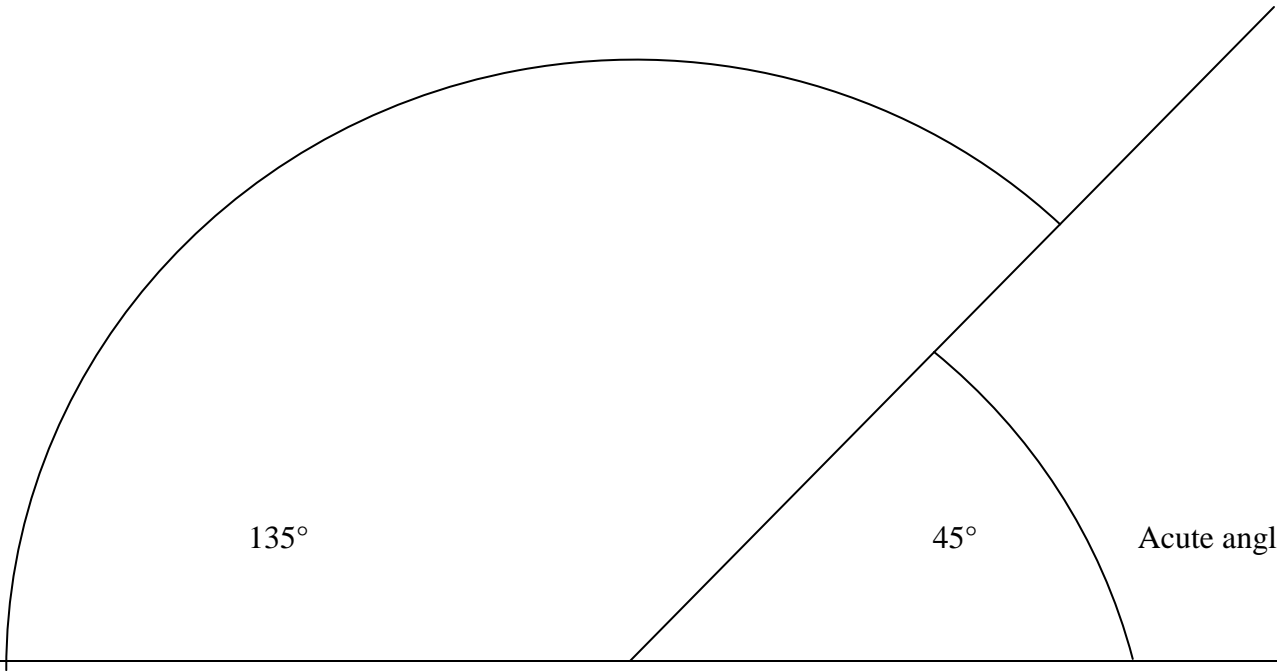
$$180^\circ - 30^\circ = 150^\circ$$

$$180^\circ - 15^\circ = 165^\circ$$

$$180^\circ - 7.5^\circ = 172.5^\circ$$

Note the illustration below

Obtuse angle



135°

45°

Acute angle