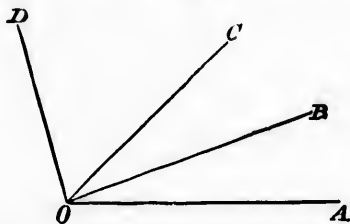


When *three or more* straight lines as  $OA$ ,  $OB$ ,  $OC$ ,  $OD$  have a point  $O$  common to all, the angle formed by one of them,  $OD$ ,



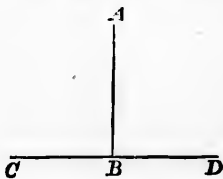
with  $OA$  may be regarded as being made up of the angles  $AOB$ ,  $BOC$ ,  $COD$ ; that is, we may speak of the angle  $AOD$  as a whole, of which the parts are the angles  $AOB$ ,  $BOC$ , and  $COD$ .

Hence we may regard an angle as a *Magnitude*, inasmuch as any angle may be regarded as being made up of parts which are themselves angles.

The size of an angle depends in no way on the length of the arms by which it is bounded.

We shall explain hereafter the restriction on the magnitude of angles enforced by Euclid's definition, and the important results that follow an extension of the definition.

IX. When a straight line (as  $AB$ ) meeting another straight line (as  $CD$ ) makes the adjacent angles ( $ABC$  and  $ABD$ ) equal to one another, each of the angles is called a **RIGHT ANGLE**; and each line is said to be a **PERPENDICULAR** to the other.



X. An **OBTUSE ANGLE** is one which is greater than a right angle.

XI. An **ACUTE ANGLE** is one which is less than a right angle.



XII. A **FIGURE** is that which is enclosed by one or more boundaries.