

CHAPTER I.

ANGLES.

1. LET OX be a fixed straight line, and let a straight line OP , initially coincident with OX , turn about the point O in one plane; then, as it turns, it is said to describe the angle XOP . The magnitude of the angle depends on the amount of revolution which OP has undergone.

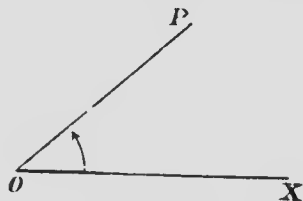


Fig. 1.

OX is called the *initial line*.

In Trigonometry there is no limit to the magnitude of the angles considered.

When OP reaches the position OX' , i.e. when $X'OX$ is a straight line, it has turned through an angle equal to two

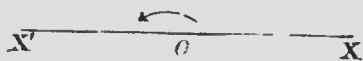


Fig. 2.

right angles; and when it again becomes coincident with OX it has turned through four right angles.