

X.

ANGLES.



Right angle.



Obtuse angle.



Acute angle.

An **angle** is the opening between two straight lines meeting at the same point. ✓

The *size or magnitude* of an angle depends entirely upon the *extent of opening*, and not upon the *length of the lines*. If the two lines forming the angle be prolonged, their extent of opening will not be changed, and the size of the angle will not be changed; but if one of the lines is movable and the other fixed, the size of the angle or opening will increase or decrease according as the movable line is drawn from or towards the fixed line.

(1) The opening formed when a vertical line meets a horizontal line is called a *right angle*. ✓

(2) An **obtuse angle** is greater than a right angle.

(3) An **acute angle** is less than a right angle.

When one line meets another line so as to form a square opening or right angle, the one line is said to be **perpendicular** to the other.

A

AREA OF PARALLELOGRAMS.

A **parallelogram** is a four-sided figure having its opposite sides equal and parallel. ✓

Parallel lines are equally distant from each other at every point. If produced, they will never meet.

(The rails of a railroad run parallel to each other.)

A *square*, a *rectangle*, a *rhombus* and a *rhomboid* are parallelograms.

(For area of square and rectangle see Book II., p. 79.)