

0.1 A Note on Notation

We like to use the notation

$$X = \text{point} (U, V)$$

to mean that X is a point that is on both U and V . If U and V are lines, it means that X is the intersection of the two lines.

If U and V are both circles or if U is a line and V is a circle and they meet in two points, it means that X is one of the points common to U and V and again we we say simply that X is on U and V . The notation

$$Y = \text{point} (U, V \setminus X)$$

means that Y is one of the points of U and V but it is not on X . We may say “ Y is on U and V without X ” or “ Y is on U and V but not on X ”.

The notation

$$Z = \text{locus} (Y, X)$$

is used when X is on a track, such as a line or segment or circle or arc, and Y is a function of X . Then Z is the collection of points Y given by all the points on the given track.