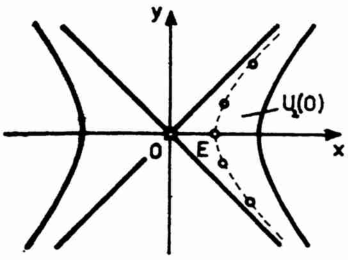

Fig. 1

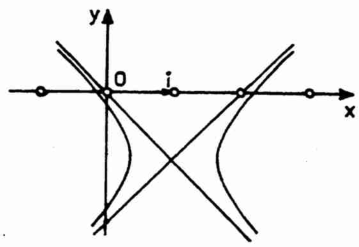

Fig. 2

then each $U_r(X)$ or $\tilde{U}_r(X)$ for which X is the point (1,-1) contains at least two members of the orbit O^B. Hence we ask how new conditions must formulated? Are $B(\rho)$ and $\dot{B}(\underline{i})$ certain 'discontinuous' motion groups if we suppose that one of the conditions which follow

$$\forall_{P,X} \exists_{r>0} \operatorname{card}(U_r(X) \cap P^B) \leq 2 \tag{2'}$$

or

$$\forall_{P,X} \exists_{r>0} \operatorname{card}(\tilde{U}_r(X) \cap P^B) \leq 2 \tag{$\tilde{2}'$}$$

is true? Under which condition is (3) or

$$\forall_{P} \exists_{r>0} \operatorname{card}(\tilde{U}_r(P) \cap P^B) = 1 \tag{$\tilde{3}$}$$

fulfilled? We will give the answer in Section $\underline{3}$.
Now we will concentrate on two cases: normed plane and pseudo-Euclidean plane.

2. The discontinuous motion groups of the normed plane

It is well known that a distance function is given in every normed plane $\underline{R}^2$. So we can regard the unit circle k which is the gauge line (Eichfigur by H. MINKOWSKI [14] - see Fig. 3).
On the other hand, the norm $\|.\|$ of the normed plane $\underline{R}^2$ is determined completely by k. Futhermore, every symmetric and convex curve which intersects each half-line by the point O just at one point has just one norm.
The isometries of $\underline{R}^2$ called motions. For instance, the translations and the reflections in points are such transformations. Each motion of the plane $\underline{R}^2$ is affine (see MAZUR and ULAM [13]) and a product of a motion for which O is a fixed point and of any translation. It is therefore sufficient to describe the subgroup G_0 of such motions which have the fixed point O. These motions map k onto itself.
For each norm there is a unique Euclidean metric. In fact, there