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§13. Ordered semigroup nets with restrictions

Let  $G$  be a nonnegative ordered additive abelian semigroup,  
let  $\ell$  be an indexing string, let  $u \in G$ , and let  $P \in \{=, \geq, >, <, \leq\}$ .

We define

$$G(\ell Pu) = \{j \in G(\ell) : \text{abs}(j)Pu\} .$$

Given any net-restriction  $t$ , we define

$$G(\ell Pu, t) = G(\ell Pu) \cap G(\ell, t)$$

and for any net-restriction  $k$  we define

$$G(\ell Pu, t, k) = G(\ell Pu) \cap G(\ell, t, k)$$

and for any  $b \in Z$  and  $r \subset Z$  we define

$$G(\ell Pu, t, b, r) = G(\ell Pu) \cap G(\ell, t, b, r).$$