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positive root

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Defines	negative root

If $R \subset E$ is a root system, with E an Euclidean vector space, then a subset $R^+ \subset R$ is called a set of positive roots if there is a vector $v \in E$ such that $(\alpha, v) > 0$ if $\alpha \in R^+$, and $(\alpha, v) < 0$ if $\alpha \in R \backslash R^+$. http://planetmath.org/node/3645Roots which are not positive are called *negative*. Since $-\alpha$ is negative if and only if α is positive, exactly half the must be positive.