\[
\lambda = \sup \{ \max(x) - \min(x) : x \geq 0 \}
\]

\[
\text{Timegap}(y) \leq (\lambda + 1) \cdot \text{Timepulse}(y)
\]
(4) For a graph $G = (V, E)$, the Steiner tree problem is to find the minimum-weight tree that spans a given subset of vertices. The problem can be solved in $O(Diam(G) + \nu V^2)$ time.

(5) Theorem: For any graph $G$, there exists a Steiner tree $T$ such that $\text{weight}(T) \leq \frac{2}{\Delta} \text{weight}(MST(G))$, where $\Delta$ is the maximum degree of a vertex in $G$. The time complexity is $O(Diam(G) + \nu V^3)$.

(13) Let $G$ be a graph with edge weights $w(e)$. The Steiner tree problem is to find a minimum-weight tree that spans a given subset of vertices. The problem can be solved in $O(Diam(G) + \nu V^2)$ time.

(12) Consider a graph $G = (V, E)$ with $n$ vertices and $m$ edges. Let $\Delta$ be the maximum degree of a vertex in $G$. The Steiner tree problem can be solved in $O(\Delta \log n)$ time.