

BIG THETA NOTATION (Θ)

↳ Big theta is a mathematical tool for describing tight bound or average case analysis of an algorithm

It conveys the average rate at which an algorithm's running time grows w.r.t the input size.

MATHEMATICAL DEFINITION.

$\theta(g(n)) = \left\{ f(n) : \exists \text{ positive constants } 'c_1', 'c_2' \text{ and } 'n_0' \right.$
such that

$$c_1 g(n) \leq f(n) \leq c_2 g(n)$$

$$\forall n > n_0$$

}

GRAPHICAL REPRESENTATION.

