



Introduction

By a graph we mean a finite, simple, connected and undirected graph  $G(V, E)$ , where  $V$  denotes its vertex set and  $E$  its edge set. Unless otherwise stated, the graph  $G$  has  $p$  vertices and  $q$  edges. By a graph we mean a finite, simple, connected and undirected graph  $G(V, E)$ , where  $V$  denotes its vertex set and  $E$  its edge set. Unless otherwise stated, the graph  $G$  has  $p$  vertices and  $q$  edges. By a graph we mean a finite, simple, connected and undirected graph  $G(V, E)$ , where  $V$  denotes its vertex set and  $E$  its edge set. Unless otherwise stated, the graph  $G$  has  $p$  vertices and  $q$  edges. By a graph we mean a finite, simple, connected and undirected graph  $G(V, E)$ , where  $V$  denotes its vertex set and  $E$  its edge set. Unless otherwise stated, the graph  $G$  has  $p$  vertices and  $q$  edges.

Theorem

For any connected graph  $G$  with  $p \geq 5$ , we have  $3 \leq \gamma_{tct}(G) \leq p - 2$ . For  $C_5$ , the lower bound is attained and for  $K_6$  the upper bound is attained.

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