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Graph Algorithms with Hostile Partners

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Abstract

A short description of the project goes here.



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# Chapter 1

## Introduction





## Chapter 2

# Dominating sets

We begin by listing some definitions.

Definition. The Dominating set,  $D$ , of a graph  $G = (E, V)$  is any subset of  $V$  such that every vertex in  $V$  is adjacent to at least one vertex in  $D$ .

Definition. The Dominating number,  $\gamma(G)$ , of a graph  $G = (E, V)$  is the size of the smallest dominating set of  $G$ .

### 2.1 min size dominating set

Theorem 1. Any graph,  $G = (E, V)$ , with  $|V| \geq 7$  has  $\gamma_g(G) \geq \lceil \frac{n}{2} \rceil$

Proof. asd

□



## Bibliography