

# Notation for edges in undirected graphs

For undirected graphs, an edge between two vertices has no direction.

There are several ways to write an edge between vertices  $u$  and  $v$  in an undirected graph.

I tend to use  $(u, v)$  to denote the edge between  $u$  and  $v$ , and other instructors write  $uv$ . You may well find other UIUC professors writing edges using  $\{u, v\}$ !

1.  $uv = vu$
2.  $(u, v) = (v, u)$
3.  $\{u, v\}$