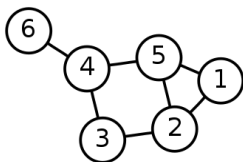# Properties of graphs

Figure : Graph with 6 vertices, public domain figure taken from
https://en.wikipedia.org/wiki/Graph_(discrete_mathematics)

A graph is simple if it has no self-loops or parallel edges.
The degree of a node v, denoted $deg(v)$, is the number of edges
incident with it.
$deg(1) = 2$
$deg(2) = 3$
$deg(3) = 2$
$deg(4) = 3$
$deg(5) = 3$
$deg(6) = 1$
The number of nodes of odd degree is 4.