SEAN MCGUINNESS, Thompson Rivers University *Hamilton Paths in the Cayley Graph of a Dihedral Group*

A well-known conjecture states that every connected Cayley graph of order three or greater is Hamiltonian. We shall look at this conjecture in the special case of the Cayley graph of a dihedral group D_n . When n is even, the conjecture is known to be true. We shall look at the case where n is odd. As it turns out, the problem in this case reduces to showing that a certain class of cubic graphs is Hamilton-laceable. We shall present some results which show that Hamilton-laceability is possible so long as the graph is big enough.