ABCD is a rectangle where *BC = 3AB*.
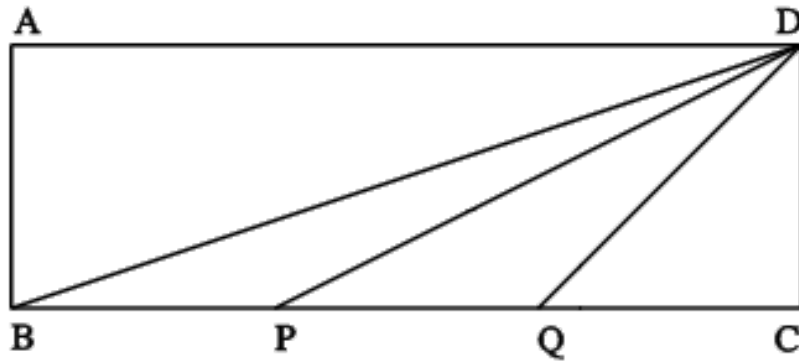*P* and *Q* are points on *BC* such that *BP = PQ = QC*.

Show that: angle *DBC* + angle *DPC* = angle *DQC*

Generalise this result.