

SUBGROUPS AND QUOTIENT GROUPS
OF ABELIAN GROUPS
WITH D.S.I.P.

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Abstract: It is known that if an abelian group A has the direct summand intersection property (for short D.S.I.P.), then any direct summand B , of A , and A/B have the same property. In this work we will study necessary and/or sufficient conditions for which some subgroups of group A (with D.S.I.P.), which are not direct summands and the quotient groups corresponding to, to have D.S.I.P.. Thus, being given an abelian group A , with D.S.I.P. and m a non-null natural number, we will study, here, the following subgroups: mA , $A[m]$, $m^{-1}A$ (in this case, A is a subgroup of a group G), $F(A)$ the Frattini subgroup of A and B_p the p -basic subgroup of A , for a p -any prime number, as well as the quotient corresponding groups. All through this paper by group we mean abelian group in additive notation and we will note with P the set of all prime numbers.