Prove rigorously that A-B = AnBC

Preposition

1 A-B & AnBC Proposition 1 HABC C A-B Let n & A-B 2 EA and 2 & B NEA NX &B NEANBEBC NEAB : A-B = AnB Preposition 2: et x & AnBc REAN REBC neAnneB ne A and x &B · AnB c A-B A-B = Angc

2) [AUB] = A CABC Watmagh Preposition 1) ACAB S (AUB) Preposition 1 (AUB) CACABC let 2 E (AUB) CACABC 2 E (AUB) CACABC AN PAUT 2 EACN XEBC 2 EACNBC : (AUB) CE ACNBC ACABCE (AUB) C SIMphi XEACAC Preposition 2 2 E A C A 2 EBC 2 & A V 2 & B 2 & (AVB) 2 & (AVB) C 2 (AVB) C 4 CAB C C (AVB) C Hence (AUB) = A CABC

3) (AnB) UC = (ANC) n(BUC) preposition 1) /Angluc = [Auc] n [Buc] 11) [Auc] n (Buc) = (Angluc Preposition 1 (Ans) vc & (Auchn (Buc) let ne (AnB) vc ne (Ang) vne c 2 E An NEBV NEC XEA VNEC n X EBV NEC ne (Avc) n x E(Buc) 2 & (Aud n (Buc) : (Anb) vc = (Avyn (Bvc) Preposition 2 [Avela[Buc] & [AnBluc [Avc) n[Buc] ne (Aud a [Buch DCE (Avc) n DCE (BVC) ne Avnec n nebvasc neAnneBVaec 25 (ANB) VXEC ne E (AnB) vc : (Ava) n(Bva) = (AnB)vo Hence (Ans) ve = / Ave) n (Bue)

4) [AUB] nc = tAnctu (Bnc) Preposition
1 (AUB) nC = (And V (Bnc) / AMI 11 (And V(Bnc) = (AUB) nc Preposition I (AUBINC & (Anc) v (Bnc) as (Aog) nxsc 25 AV 25B 1 25C ne EAnd VarBnc : (AUB) nC = (Andu (Bnd) proposion 2 (Anc) v (Bnc) E (AUB) , L ne (And v (Bnc) 28/And VXE(Bnc) ne Annec V reabonec 22 AV28BNNECON x E(AUB) n NEC 22 CAUB) nc 2 (AA) · And v (Bnd = (AUB) nc Hence [AVBINC = (And V (Bnc)