```
4. Basis
    let e=x
                       prientagle)=0+0
    Vr(e) + cn(e) = 1+0
        => vr(e)+cn(e)=pr(e)+ag(e)+1
   Calculations are the same for e=y and e=z
   Induction
    Let ei, ez & E be arbi.
    Supp. vr(e,)+cn(e)=pr(e)+ag(e,)+1 [IH]
          vr(e2)+ Cn(e2)= pr(e2)+ ag(e2)+1
    Prove YouE, vriet chier=priet+agle)+1
      Case 1: e=(e,1e2)
           vr(e) + cn(e) = vr((e, ne2)) + cn((e, ne2)) by def of e
                                                              by def of vr, cn
                        = Vr(e_1) + Vr(e_2) + cn(e_1) + cn(e_2) + 1
                                                              by IH
                        = pr(e1) + ag(e1) + 1 + pr(e2) + ag(e2) + 1 + 1
                                                            by defof pr, ag
                        = pr((e, ne2)) + ag((e, ne2)) +1
                         pr(e) + ag(e) +1 as wanted
     Case 2: e=le, vez
          Same as case 1, replacing 1 with v
     (ase 3: e= (e, nez)
         vr(e)+cn(e) = vr((e_1 \wedge e_2)) + cn((e_1 \wedge e_2))
                                                      by def of e
                      = vr(e1)+vr(e2)+cn(e1)+cn(c2)+1 by def of vr, cn
                      = prlei) + aglei) + 1 + prlei) + aglei) + 1 + 1 by IH
                      = pr(ceinez) + ag((einez))+1 by def of priag
                                                        This differs from case 1,
                      = pr(e) +ag(e) +1
                                                        as in this case, 2 is
                         95 wanted
                                                        being added to ag
    Case 4: e= <e, ve>>
Same as case 3, replacing n with V
                                                        rather than pr.
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.. Vee &, vr(e) + cn(e)= pr(e) + cg(e) + 1