Schutz 6.31,0-Show that constant differentiation should product rule: (VOBNB) in = Vobs m Vpg + VOBNB+in. (Vas NB+)in = Tatil (using Tat = Vas NB) = Tom + To Tom - To Tom = (Vas Mar), ut Vos Mar Ton - Vas Mar Ton = Pap West + Las Mest + Las Mester - Nas Mes Ism = (Vaput Vobtan) NB+ + Vap (NBtim- FNpo Ton). Reall that Vax, n= vax + Vax Ton + Vax Ton, WBoin = WBOIN - NBO Ton - NO J BM So it only remains to show VX6TBNBS-VXBNGJTBN = O.

Schutz 6-3/0
Observe that
VJETEMBI-VOBWOJTEM 3
withen completely in tensors, so we can apply an index change
$V^{XB} = g^{B}V^{XB}$
=>. Vd & Ton Wod - VdB West Ton
= Vde [ Tompst - ge Wat Tom]
= Vdo [ Ton Wer - Wat Ton ].
<i>= 0</i> .