$$+\bar{g}(\alpha(\nabla_X Y, Z), \eta) + \bar{g}(\alpha(\nabla_X Z, Y), \eta)$$

$$-\bar{g}(\alpha(\nabla_Y X, Z), \eta) - \bar{g}(\alpha(\nabla_Y Z, X), \eta)$$

$$= \bar{g}\left(\bar{\nabla}_Y \alpha(X,Z) + A^{Y}_{\alpha(X,Z)}, \eta\right)$$

$$-\bar{g}(\bar{\nabla}_X \alpha(Y,Z), \eta)$$

$$= \bar{g}(\bar{\nabla}_Y \bar{\nabla}_X Z - \bar{\nabla}_Y \nabla_X Z, \eta)$$

$$-\bar{g}(\bar{\nabla}_X \bar{\nabla}_Y Z - \bar{\nabla}_X \nabla_Y Z, \eta)$$

$$+\bar{g}(\bar{\nabla}_{\nabla_X Y} Z, \eta) + \bar{g}(\bar{\nabla}_{\nabla_X Z} Y, \eta)$$

$$-\bar{g}(\bar{\nabla}_{\nabla_Y X} Z, \eta) - \bar{g}(\bar{\nabla}_{\nabla_Y Z} X, \eta)$$

$$\bar{g}(\bar{\nabla}_{[X,Y]} Z, \eta)$$

$$= \bar{R}(X, Y, Z, \eta) \qquad \#$$

<u>Cor</u> If $\bar{M}$ has const. secti. curvature,
then $(\bar{\nabla}_X \alpha)(Y, Z, \eta) = (\bar{\nabla}_Y \alpha)(X, Z, \eta)$.