

Group_____Scribe_____

Other group members_____

Group Quiz for Section 4.4

Let V, W be finite-dimensional inner product spaces. Prove the parallelogram identity: for all $v, w \in V$,

$$\|v + w\|^2 + \|v - w\|^2 = 2\|v\|^2 + 2\|w\|^2.$$