**Proof of Ceva's theorem**

Using the notation of Figure 4.3 in the textbook, the triangles $\triangle AFX$ and $\triangle CHX$ are

similar: $|AF|/|HC| = |FX|/|CX|$.

Further similar triangles: $XFB, CGX$; $ABD, HCD$; $ABE, ECG$. Reasoning: same.

Therefore $AF/FB = HC/CG$ times $BD/DC = AB/HC$ times $CE/EA = CG/AB$ must

equal 1.

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