1135-05-478 **Shira Zerbib*** (zerbib@umich.edu), MSRI, Berkeley, CA 94720. *Improving the known bound in Vizing's conjecture.*

A well-known conjecture of Vizing [**?**] is that $\gamma(G\Box H) \geq \gamma(G)\gamma(H)$ for any pair of graphs G, H, where γ is the domination number and $G\Box H$ is the Cartesian product of G and H. Suen and Tarr, improving a result of Clark and Suen, showed $\gamma(G\Box H) \geq \frac{1}{2}\gamma(G)\gamma(H) + \frac{1}{2}\min(\gamma(G), \gamma(H))$. We further improve their result by showing $\gamma(G\Box H) \geq \frac{1}{2}\gamma(G)\gamma(H) + \frac{1}{2}\max(\gamma(G), \gamma(H))$. (Received September 05, 2017)