

The majority of the credit you receive will be based on the completeness and the clarity of your responses. **Show all of your work and justify your solutions as much as possible.**

This is a 15 minute quiz and has 1 questions, for a total of 10 points

- (10 points) 1. Prove the following result. Let $a, b, x, y \in \mathbb{Z}$. If a, b are even, then $ax + by$ is even.