▷. **Conjecture A**. If a, b, and c are integers, then $ab + ac$ is an even integer.

Note symbolically: $(\forall\,(a, b, c) \in \mathbb{Z}^3)\,[\ ab + ac \text{ is even }]$

▶. Is Conjecture A true or false? Justify your answer.

▷. It should be understood that the instructions means to do ọ̰n̰ẹ of the following.

- If the conjecture is false, then say the conjecture is false. Next justify by providing a counterexample (i.e., an example which shows the conjecture is false). Explain why your counterexample is indeed a counterexample.

- If the conjecture is true, then say the conjecture is true. Next justify by providing a proof of the true conjecture.

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