The purpose of this exercise is to test your understanding of laws of predicate logic.

1. Consider the statement

\[ (\forall n \in \mathbb{Z})(\exists m \in \mathbb{Z})(|n - m| = 1) \]

Is this statement True or False. Justify your answer.

2. Consider the statement

\[ (\exists m \in \mathbb{Z})(\forall n \in \mathbb{Z})(|n - m| = 1) \]

Is this statement True or False. Justify your answer.