- 1. ↕ **True/False: Assume that variables "x" and "y" ran...**

	Points: **2.5**

Question	Assume that variables "x" and "y" range over all the natural numbers 0, 1, 2, ... and "$\geq$" means "greater than or equal to". Under this interpretation, consider the following two sentences in the language of first-order logic (FOL) **(A)** $\quad \forall x \exists y \quad (x \geq y)$ **(B)** $\quad \exists y \forall x \quad (x \geq y)$ **True or False?** Formula (A) is true under this interpretation
Answer	✅ True False

- 2. ↕ **True/False: True or False?   Formula&nb...**

	Points: **2.5**

Question	**True or False?** Formula (B) is true under this interpretation
Answer	✅ True False

- 3. ↕ **True/False: True or False?   (A) l...**

	Points: **2.5**

Question	**True or False?** (A) logically entails (B)
Answer	True ✅ False

- 4. ↕ **True/False: True or False?   (B)&n...**

	Points: **2.5**

Question	**True or False?** (B) logically entails (A)
Answer	✅ True False