

Written HW1 – MATH 2510 Spring 2023

Is the argument valid or invalid? If it is valid, then attempt to explain why. If it is invalid, then provide a counterexample.

1. Anyone who lives in the city Helvetia, WV also lives in Randolph County. Tabitha lives in Randolph County. Therefore, Tabitha lives in Helvetia, WV.
2. Anyone who lives in Helvetia, WV also lives in Randolph County. Tabitha does not live in Randolph County. Therefore, Tabitha does not live in Helvetia, WV.
3. Anyone who lives in Helvetia, WV also lives in Randolph County. Tabitha does not live in Helvetia, WV. Therefore, Tabitha does not live in Randolph County.
4. All grass is green. Simon is green. Therefore, Simon is grass.
5. Only grass is green. Simon is green. Therefore, Simon is grass.