UH - Math 3336 - Dr. Heier - Fall 2019
HW 12
Due Thursday, Nov. 21, at the beginning of class.
Solutions may be handwritten. Use regular sheets of paper, stapled together.
Do not forget to write your name on page 1.

1. (1 point) Section 9.1, Problem 3 (do not do "antisymmetric", as this was not discussed in class)

2. (1 point) Section 9.1, Problem 7 a) to c) (do not do "antisymmetric", as this was not discussed in class)

3. (1 point) Section 9.1, Problem 32

4. (1 point) Section 9.1, Problem 34 a) to f)

5. (1 point) Section 9.1, Problem 36

6. (1 point) Section 9.3, Problem 3

7. (1 point) Section 9.3, Problem 27

8. (2 points) Define the relation R on the integers by $(a, b) \in R$ if and only if $2a + 5b \equiv 0 \bmod 7$. Prove that R is an equivalence relation. What is the equivalence class of 3?

9. (1 point) Section 9.5, Problem 44