

Math 234 Preview Exercises

Section 8.4

NAME

Read Section 8.4 in the textbook and answer the following questions. *Hand in this worksheet at the next class.*

1. What are three equivalent statements stated in Theorem 8.4.1?

2. Given integers a and $n > 1$, what is **the residue of a modulo n** ?

3. What is **modular arithmetic**?

4. In our text, what is the meaning of \mathbf{Z}_n ?

5. What is the meaning of a **binary operation** on a set S ?

6. What is the definition of a **commutative ring**?