

# Math 234 Preview Exercises

Section 5.2

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NAME

Read Section 5.2 in the textbook and answer the following questions. *Hand in this worksheet at the next class.*

1. What is the **Principle of Mathematical Induction**?
  
  
  
  
  
  
  
  
  
  
2. What are the two steps in a **proof by mathematical induction**?
  
  
  
  
  
  
  
  
  
  
3. Briefly describe the basis step and the inductive step in the proof of Theorem 5.2.2.
  
  
  
  
  
  
  
  
  
  
4. Briefly describe the basis step and the inductive step in the proof of Theorem 5.2.3.
  
  
  
  
  
  
  
  
  
  
5. What is a **geometric sequence**?