**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_**

**ANSWER KEY**

**BOX QUIZ 7**

**Answer the following questions and show all work.**

|  |  |
| --- | --- |
| **Find the prime factorization of 5,000,000.**  **5 • 1,000,000**  **1,000 • 1,000**    **100 • 10 100 • 10**    **10 • 10 2 • 5 10 • 10 2 • 5**  **2 • 5 2 • 5 2 • 5 2 • 5**    **26 • 57** | **Answer the question with “Yes” or “No” and state a divisibility rule as a reason for that answer.**  **Is 123,144 divisible by 6?** |
| **Show your work for 231 X 37 using the Lattice Method algorithm**. | **Identify the pattern as geometric or arithmetic and find the next three terms.**  **5, 11, 17, 23**  arithmetic  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  29, 35, 41  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |