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

**ANSWER KEY**

**BOX QUIZ 1**

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

|  |  |
| --- | --- |
| **List the four steps to Polya’s problem solving method.**   1. Understand the problem. 2. Make a plan. 3. Carry out the plan. 4. Look back over your work. How could it be better? | **How many squares, of any possible size, are on a 4 × 4 chessboard? Explain how you found your solution.**  02 + 12 + 22 + 32 + 42 = 0 + 1 + 4 + 9 + 16 = 30 |
| **Write a solution to the following pattern and identify an example for the next three terms:**  **Zoe, Yasmin, Xavier, Willy…**  Vivian  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  Uria  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  Tom  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  Answers will vary. Names in descending alphabetical order | **Given the following sequence:**  **5, 25, 125, ………**   1. **Identify the pattern as geometric or arithmetic**   Geometric  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**     1. **Identify the next three terms**   625  **\_\_\_\_\_\_**  3125  **\_\_\_\_\_\_**  15625  **\_\_\_\_\_\_** |