Learning Target: Describe, extend, and complete number patterns. **Success Criteria:**

- I can describe a pattern.
- I can write a rule for a pattern.
- I can extend and complete a pattern.

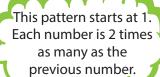
Think and Grow

Example Write a rule for the pattern. Write the missing numbers.

This pattern starts at 50. Each number is 25 more than the previous number.

50, 75, 100, 125, _____, ____, ____

The rule is ______.





Example Write a rule for the pattern. Write the missing numbers.

1, 2, 4, 8, _____, ____

The rule is ______.



Show and Grow

Write a rule for the pattern. Write the missing numbers.

- **1.** 6, 18, 30, 42, _____, ____, ____
- **2.** 720, 620, 520, 420, ______, ______
- **3.** 3, 6, 12, 24, _____, ____, ____
- **4.** 190, 182, 174, 166, _____, ____, ____

Practice

Name _____

Write a rule for the pattern. Write the missing numbers.

5. 17, 37, 57, 77, ______, _____

6. 591, 541, 491, 441, _____, ____, ____

7. 63, 56, 49, 42, _____, ____, ____

8. 3, 12, 21, 30, _____, ____, ____

9. 5, 10, 20, 40, _____, ____

10. 1, 3, 9, 27, _____, ____

Complete the pattern. Write the missing numbers.

11. 120, 133, _____, 159, _____, ___, 198

12. 210, _____, 180, 165, _____, 135, _____

13. Open-Ended Choose a number to start a pattern. Write a rule. Then write the next 5 numbers in the pattern.

friend says that the rule for the pattern is "Multiply by 8." Is your friend correct? Explain.

8, 16, 24, 32, 40

15. Modeling Real Life The first row of a display has 5 candles. Each row has 4 more candles than the previous row. How many candles are in the sixth row?



16. Modeling Real Life Your class recycles 4 cans the first week. Each week, your class recycles 3 times as many cans as the previous week. How many cans will your class recycle the fourth week?

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