Patterns

A pattern is a series of numbers of figures that follows a rule. The rule of the pattern tells you how to get from each number in the pattern to the next number. The rule can also help you find a missing number in a pattern.

- **Example A**: Increasing Pattern

  5, 8, 11, 14, 17, 20

  Rule is to add 3

- **Example B**: Decreasing Pattern

  100, 95, 90, 85, 80

  Rule is to subtract 5

- **Example C**: Increasing Pattern

  3, 7, 11, 15, 19, 23, 27

  Rule is to add 4

- **Example D:** Create two patterns with 5 **terms** that both start with 0. Pattern A uses the rule add 2. Pattern B uses the rule add 8. Make a table to show the **corresponding terms**.
Write the terms for Pattern A
  o Use the rule add 2. Start with 0.
      0, 2, 4, 6, 8
Write the terms for Pattern B.
  o Use the rule add 8. Star with 0.
      0, 8, 16, 24, 32

Pattern A	0	2	4	6	8
Pattern B	0	8	16	24	32

Compare terms.

$$8 \div 2 = 4$$
$$16 \div 4 = 4$$
$$24 \div 6 = 4$$
$$32 \div 8 = 4$$

Answer: The terms in Pattern B are always 4 times the value of the corresponding terms in Pattern A.