Lesson 5.2 Sequences

Objective: To describe relationships and extend terms in arithmetic sequences.

Arithmetic sequence: Each number (term) is found by adding the same number to the previous.

Ex.1 Describe the relationship between the terms in the arithmetic sequence 8, 13, 18, 23, ... Then write the next 3.

8, 13, 18, 23 → +5 +5

= +5. 28, 33, 38

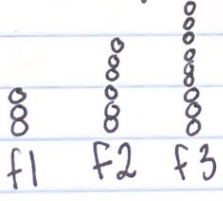
Ex.2 Describe the relationship between the terms in the arithmetic sequence 0.4, 0.6, 0.8, 1.0... Then find the next 3.

0.4, 0.6, 0.8, 1.0 → +0.2 +0.2

= +0.2. 1.2, 1.4, 1.6

describe; next 3.

Ex.3 If the pattern continues, what algebraic expression can be used to find the number of circles used in any figure? How many would be in the 50th?



n = figure position.

$3n$ $3 \cdot 50$

$= 150$