

Grade 4 – NUMERACY – LESSON 3

Number Patterns

Number patterns help students develop problem solving skills useful for understanding multiplication and lay the foundation for more complex pattern recognition in later grades.

A **number pattern** is a sequence of numbers that follow a certain rule. We provide “proof” to show that the number pattern rule is correct.

For example:

Pattern	Rule	Proof
1, 2, 3, 4, 5	Add 1	$1+1=2+1=3+1=4+1=5$
50, 40, 30, 20, 10	Subtract 10	$50-10=40-10=30-10=20-10=10$

Write the next number in the sequence. Then write what the pattern is for that sequence.

1.	2, 4, 6, 8, 10, 12, _____	
2.	3, 6, 9, 12, 15, 18, _____	
3.	23, 20, 17, 14, 11, 8, _____	

Write the next number in the sequence and what the pattern is for that sequence. Then show the proof.

3.	4, 14, 24, 34, 44, ___		
4.	52, 44, 36, 28, 20, ___		
5.	7, 14, 21, 28, 35, 42, ___		

Write the next number in each sequence according to the rule.

7.	Add 5	55, 60, 65, _____, _____, _____, _____
8.	Subtract 11	88, 77, _____, _____, _____, _____, _____
9.	Add 9	0, _____, _____, _____, _____, _____, _____

Extend: Create your own pattern rule, choose a starting number for it, and write the sequence. Can someone else in your home figure out your pattern by looking at your sequence?