Grade 5 Mathematics

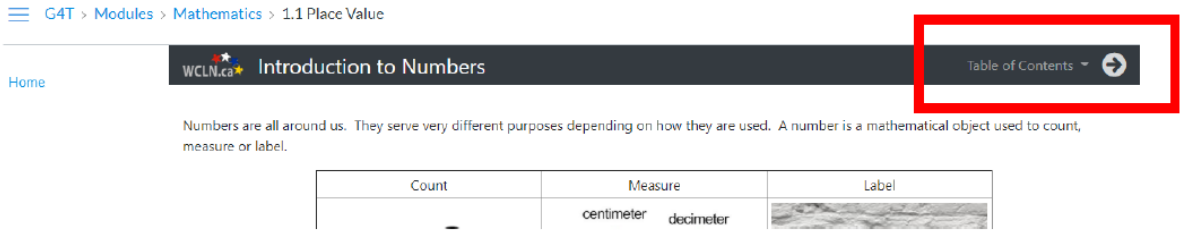
Week of November 30 – December 4

Lesson 3.1 – Sequences

Lesson Materials

- Lessons for Section 3.1 Sequences
- Sequences Learning Guide (This PDF)

Use the link above to open the lessons for this section. Remember: on the lesson page, use the arrow next to the "Table of Contents" at the **top of the page** to move through the lessons. You can also click on the Table of Contents to open the menu so you can jump to a specific lesson page.



Work through the online lessons. You can work at your own pace or follow the suggested schedule below. Complete the activities in your Learning Guide as you work through the lessons. You can print the Learning Guide, or, copy out the questions on a separate piece of paper. Be sure to try the games and practice quizzes as you make your way through the online lesson book.

Suggested Lesson Schedule

Monday • Sequences • LG 3.1 #1-2, p. 1-2 **Tuesday** • Find the Error • LG #3, p. 3 **Wednesday** • More Complex Sequences • LG #4-5, p. 4-5	**Thursday** • Patterns • T-Tables • LG #6-7, p. 5-6 **Friday** • Relationships in Tables • Variables • LG #8, p. 6

Name:

UNIT 3 LEARNING GUIDE – EQUATIONS

INSTRUCTIONS:

Using a pencil, complete the following questions as you work through the related lessons. Show ALL of your work as is explained in the lessons. Do your best and always ask questions if there is anything that you don't understand.

3.1 SEQUENCES

1. Extend each increasing pattern with the next 5 numbers. Determine the pattern rule.
   Example:

2, 6, 10, 14, 18, 22, 26, 30, 34

Pattern Rule: Start at 2 and add 4 each time

a. 3, 6, 9, 12, _____, _____, _____, _____, _____

Pattern Rule: _____

b. 12, 24, 36, 48, _____, _____, _____, _____, _____

Pattern Rule: _____

c. 2, 4, 8, 16, _____, _____, _____, _____, _____

Pattern Rule: _____

d. 60, 66, 72, 78, _____, _____, _____, _____, _____

Pattern Rule: _____

e. 1, 3, 9, 27, _____, _____, _____, _____, _____

Pattern Rule: _____

2. Extend each decreasing pattern with the next 5 numbers. Determine the pattern rule.

Example:

40, 36, 32, 28, 24, 20, 16, 12, 8

Pattern Rule: Start at 40 and subtract 4 each time

a. 105, 95, 85, 75, _____, _____, _____, _____, _____

Pattern Rule: _____

b. 1003, 999, 995, 991, _____, _____, _____, _____, _____

Pattern Rule: _____

c. 325, 300 , 275, 250, _____, _____, _____, _____, _____

Pattern Rule: _____

d. 67, 64, 61, 58, _____, _____, _____, _____, _____

Pattern Rule: _____

e. 99, 88, 77, 66, _____, _____, _____, _____, _____

Pattern Rule: _____

3. Read the pattern rule and create the first 4 terms of each pattern. The first one is done for you.
Example:

Rule: Start at 100 subtract 5 each time.

Pattern: 100, 95, 90, 85 _____

a. Rule: Start at 24 add 7 each time.

Pattern: _____

b. Rule: Start at 72 subtract 3 each time.

Pattern: _____

c. Rule: Start at 56 subtract 8 each time.

Pattern: _____

d. Rule: Start at 31 add 12 each time.

Pattern: _____

4. Read the pattern rule and create the first 5 terms of each pattern. The first one is done for you.

Example:

Rule: Start at 8. Add 2. Increase the number you add by 2 more each time.

+2 +4 +6 +8

8, 10, 14, 20, 28

a. Rule: Start at 2. Alternately add 2, then add 3.

_____

b. Rule: Start at 5. Increase the number you add by 4 more each time.

_____

c. Rule: Start at 2. Multiply by 2. Increase the number you multiply by 2 each time.

_____

d. Rule: Start at 2. Alternately multiply by 10 and divide by 2.

_____

e. Rule: Start at 5. Alternately multiply by 2 more each time, then divide by 2.

_____

5. Write the next 4 terms in each pattern. Write each pattern rule.

a. 100, 125, 120, 145, 140, _____, _____, _____, _____

Rule: _____

b. 85, 81, 90, 86, 95, _____, _____, _____, _____

Rule: _____

c. 36, 72, 144, 288, 576, _____, _____, _____, _____

Rule: _____

6. Use the t-table to solve the increasing block pattern.

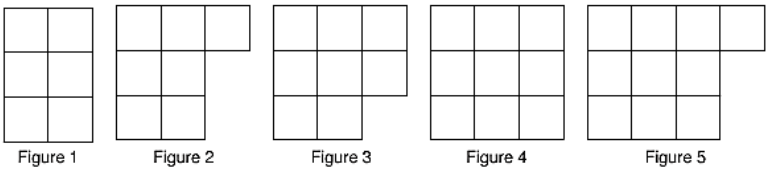


Figure	Number of Blocks
1	6
2	7
3	
4	
5	
6	
7	

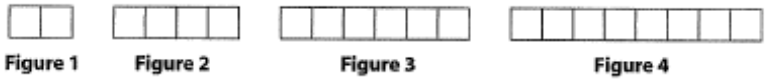
a. How many blocks will there be in Figure 6 and Figure 7?

_____

b. What is the pattern rule for the block pattern?

_____

7. Use the t-table to solve the increasing block pattern.



a. How many blocks will there be in Figure 5 and Figure 6?

_____

b. How many blocks will there be in Figure 10?

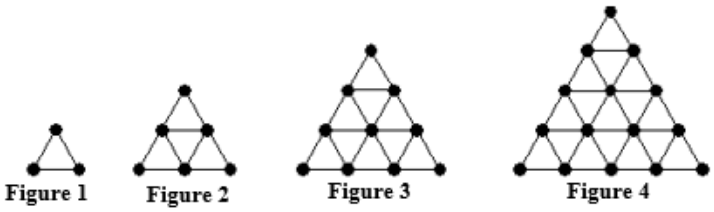
_____

c. What is the pattern rule?

_____

Figure	Number of Blocks
1	
2	
3	
4	
5	

8. Use the t-table to solve the dot pattern.



a. How many dots will there be in Figure 5 and Figure 6?

_____

b. How many dots will there be in Figure 10?

_____

c. What is the pattern rule for the dot pattern?

_____

Figure	Number of Dots
1	3
2	6 (+3)
3	10 (+4)
4	
5	
6	