

Math 9 LG 2

POWERS AND EXPONENTS



INTRODUCTION:

Thrill-seekers around the world ... Check out pages 88-89.



LEARNING GUIDE EXPECTATIONS:

On the completion of this learning guide you will be able to:

- 1) use Exponents to describe Numbers.
- 2) understand the Exponent Laws.
- 3) use the correct Order of Operations



EVALUATION:

You are ready to progress to the next learning guide when you can demonstrate your understanding of the above expectations. Please refer to your Mathematics 9 Marks Record Sheet to determine the assessment.



RESOURCES NEEDED:



Math Links 9 Text

LEARNING ACTIVITIES:



Expectation #1: Using Exponents to Describe Numbers.



1. [Watch and take notes on instructional video on Introduction to Exponents](#)



2. In the Math Links 9 text, read pages 92-93, all the purple boxes, the Literacy Link, and work through Example 1 on page 93. Now complete #4, 5 on page 97.
3. In the Math Links 9 text, work through Example 2 on page 94. Now complete #6, 7, 8, and 9 on page 97.
4. Work through Example 3 on page 95. Now complete #10, 11, 12, 14, 16, 17, 20, 21 on page 97.
5. Read Key Ideas on page 96. In your math journal, complete the journal entry for LG2 Expectation 1.



Expectation #2: Exponent Laws.



1. [Watch and take notes on instructional video on Exponent Laws – Part 1](#)



2. In the Math Links 9 text, work through Example 1 on page 101. Now complete #5, 6, 7, 8 on page 106.

3. In the Math Links 9 text, work through Example 2 on page 102. Now complete #9, 10, 11, 12, 13 on page 106.



4. [Watch and take notes on instructional video on Exponent Laws – Part 2](#)

5. In the Math Links 9 text, work through Example 3 on pages 102-103. Now complete #14, 15, 16, 17 on pages 106-107.

6. In the Math Links 9 text, work through Example 4 on page 104. Now complete #18, 19 on pages 106-107.



5. Read Key Ideas on page 105. In your math journal, complete the journal entry for LG2 Expectation 2.



6. In the Math Links 9 text, complete #20, 21, 23, 24, 26 on page 107.



Expectation #3: Order of Operations.



1. [Watch and take notes on instructional video on the Order of Operations](#)



2. In the Math Links 9 text, work through Example 1 on page 109. Now complete #5, 6, 7 on page 111.

3. In the Math Links 9 text, work through Example 2 on pages 110. Now complete #8, 9 on pages 111-112.



4. Read Key Ideas on page 110. In your math journal, complete the journal entry for LG2 Expectation 3.



5. In the Math Links 9 text, complete #10, 12, 13, 14, 16, 17, 19 on pages 112-113.

REVIEW AND CHALLENGE



1. In the Math Links 9 text, complete Chapter 3 Review pages 120-121 #1-7, 9, 10, 11, 12, 13, 15, 16, 18, 19.