

Math 8 LG 1

RATIOS, RATES, AND PROPORTIONAL REASONING

INTRODUCTION:

In this learning guide, you will learn skills with ratios, rates and proportional reasoning that will help you solve problems in a variety of real life contexts... Check out Chapter 02 Opener pages 42 & 45.

LEARNING GUIDE EXPECTATIONS:

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


- 1) express ratios using different notations.
- 2) use ratios and rates in real-life examples.
- 3) solve problems involving rates, ratios and proportional reasoning.

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 8 Marks Record Sheet to determine the assessment.

RESOURCES NEEDED:

 Math Links 8 Text

 THSS Math 8 Learning Guides and Math 8 Journal Entries Package

LEARNING ACTIVITIES:

Expectation #1: Express ratios using different notations.



1. [Watch and take notes on instructional video on Ratios.](#)



2. In the Math Links 8 text, complete the Explore the Math activity with your class on Chapter 02 Section 2.1 pages 46-47.
3. In the Math Links 8 text, work through Example 1 on Chapter 02 Section 2.1 pages 47-48. Now complete #5, 7, 8 on Chapter 02 Section 2.1 page 51.

4. In the Math Links 8 text, work through Example 2 on Chapter 02 Section 2.1 pages 49-50. Now complete #10, 11 on Chapter 02 Section 2.1 page 52.



5. Read Key Ideas on Chapter 02 Section 2.1 page 50. In your math journal, complete the journal entry for LG1 Expectation 1.



6. In the Math Links 8 text, complete #12, 15, 21 on Chapter 02 Section 2.2 pages 52-54.



Expectation #2: Use ratios and rates in real-life examples.



1. [Watch and take notes on instructional video on Rates.](#)



2. In the Math Links 8 text, work through Example 1 on Chapter 02 Section 2.2 pages 56-57. Now complete #4, 6 on Chapter 02 Section 2.2 page 60.

3. In the Math Links 8 text, work through Example 2 on Chapter 02 Section 2.2 pages 57-58. Now complete #7, 8 on Chapter 02 Section 2.2 page 60.



4. Read Key Ideas on Chapter 02 Section 2.2 page 59. In your math journal, complete the journal entry for LG1 Expectation 2.



5. In the Math Links 8 text, complete #10, 11, 13, 18 on Chapter 02 Section 2.2 page 61.



Expectation #3: Solve problems involving rates, ratios and proportional reasoning.



1. [Watch and take notes on instructional video on Proportion.](#)



2. In the Math Links 8 text, work through Example 1 on Chapter 02 Section 2.3 pages 64-65. Now complete #4, 5, 6, 8, 9 on Chapter 02 Section 2.3 page 67.

3. In the Math Links 8 text, work through Example 2 on Chapter 02 Section 2.3 pages 65-66. Now complete #10, 12 on Chapter 02 Section 2.3 page 67.



4. Read Key Ideas on Chapter 02 Section 2.3 page 66. In your math journal, complete the journal entry for LG1 Expectation 3.



5. In the Math Links 8 text, complete #15, 18, 20, 25 on Chapter 02 Section 2.3 page 68-69.

REVIEW AND CHALLENGE



1. In the Math Links 8 text, complete Chapter 2 Review pages 70-71 #1-6, 8, 11a, 13, 15, 16.