

Foundations of Math 10 LG 13

SOLVING SYSTEMS OF LINEAR EQUATIONS ALGEBRAICALLY



INTRODUCTION:

Analyzing linear relations is a skill that is ... Check out pages 466 & 467.



LEARNING GUIDE EXPECTATIONS:

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

- 1) solve systems of linear equations using the substitution method.
- 2) solve systems of linear equations using the elimination method.
- 3) choose a strategy to solve a problem that involves a linear system.



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 10 Marks Record Sheet to determine the assessment.



RESOURCES NEEDED:



Mathematics 10 Text

LEARNING ACTIVITIES:



Expectation #1: Solve systems of linear equations using the substitution method.



1. [Watch and take notes on instructional video on Solving Systems of Equations Using the Substitution Method.](#)



2. In the Mathematics 10 text, read pages 468 - 470, the purple boxes on p. 470, and work through Example 1 on pages 470 - 471.
3. In the Mathematics 10 text, work through Example 2 on pages 472 - 473.



4. Read the Key Ideas on page 474 and review the Link the Ideas section on page 470, and then in your Math Journal, choose an example to show how to solve a linear system by the substitution method. Be sure to clearly show your steps.



5. In the Mathematics 10 text, complete #1, 3 - 9, 11, 13 - 16, 18 - 21, 23, & 25 on pages 474 - 479.
6. For extra practice, click [here](#). For the answers to the extra practice, click [here](#).



Expectation #2: Solve systems of linear equations using the elimination method.



1. [Watch and take notes on instructional video on Solving Systems of Equations Using the Elimination Method.](#)



2. In the Mathematics 10 text, read pages 480 - 482, the purple boxes on p. 482, and work through Example 1 on pages 482 - 483.

3. In the Mathematics 10 text, work through Example 2 on pages 484 - 485.

4. In the Mathematics 10 text, work through Example 3 on pages 486 - 487.



5. Read the Key Ideas on page 488 and review the Link the Ideas section on page 482, and then in your Math Journal, choose an example to show how to solve a linear system by the elimination method. Be sure to clearly show your steps.



6. In the Mathematics 10 text, complete #1 - 6, 8, 10, 12, 13, 15, 17 - 19 on pages 488 - 491.

7. For extra practice, click [here](#). For the answers to the extra practice, click [here](#).



Expectation #3: Choose a Strategy to Solve Problems Using Systems of Linear Equations.



1. [Watch and take notes on instructional video on Solving Problems with Systems of Linear Equations.](#)



2. In the Mathematics 10 text, read pages 492 – 493 and work through Examples 1 and 2 on pages 494 - 497.



3. In the Mathematics 10 text, complete #1 - 5, 7, 8, 10, 11, 12, & 13 on pages 498-501.

4. For extra practice, click [here](#). For the answers to the extra practice, click [here](#).

REVIEW AND CHALLENGE



1. In the Mathematics 10 text, complete Chapter 9 Review pages 502-503 #1 – 13.



2. In the Mathematics 10 text, complete Chapter 9 Practice Test pages 504-505 #1 – 12.

PRACTICE QUIZZES

[Practice quiz #1](#)

[Practice quiz #2](#)

[Practice quiz #3](#)

[Practice quiz #4](#)

[Practice quiz #5](#)