

# Math 9 LG 8

## SOLVING LINEAR EQUATIONS - Part 1



### INTRODUCTION:

Equations are used in many real-life situations, so learning how to solve them is a very important skill. As well, learning a clear method for solving these equations is a key building block to help you to be successful in future math courses.



### LEARNING GUIDE EXPECTATIONS:

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

- 1) Solve one-step linear equations with rational coefficients.
- 2) Solve two-step linear equations with rational coefficients.
- 3) Solve multi-step linear equations with rational coefficients (using the distributive law).



### 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: Solve one-step linear equations with rational coefficients.**



1. In your math journal, complete the journal entry for guide 8 Expectation 1 Part A.



2. [Watch and take notes on instructional video on Solving One Step Equations](#)



3. In your math journal, complete the journal entry for guide 8 Expectation 1 Part B.



4. In the Math Links 9 text, work through example #2 on page 297. Now complete # 8 and #9 on page 301.



5. In your math journal, complete the journal entry for guide 8 Expectation 1 Part C.



6. In the Math Links 9 text complete #6 and #7 on page 301.



7. In your math journal, complete the journal entry for guide 8 Expectation 1 Part D.



8. In the Math Links 9 text complete #10 and #11 on page 302.



**Expectation #2: Solve two-step linear equations with rational coefficients.**



1. In your math journal, complete the journal entry for guide 8 Expectation 2 Part A.



2. In the Math Links 9 text complete #9, 10, 11 and 12 on page 311.



3. [Watch and take notes on instructional video on Solving Equations with Fractions \(Part 1\)](#)

\* Example #1 and #2 ONLY.



4. In your math journal, complete the journal entry for guide 8 Expectation 2 Part B.



5. In the Math Links 9 text complete #7 and #8 on page 311.



**Expectation #3: Solve multi-step linear equations with rational coefficients (using the distributive law).**



1. [Watch and take notes on instructional video on Solving Multiple Step Equations](#)

\* Examples #1, 2 and 3 ONLY.



2. In your math journal, complete the journal entry for guide 8 Expectation 3.



3. In the Math Links 9 text complete #6 and #7 on page 319.



4. [Watch and take notes on instructional video on Solving Equations with Fractions \(Part 2\)](#)

\* Example #1 ONLY.



5. In the Math Links 9 text, work through Example #1(b) on page 316. Now complete #8, #9, #10, and #11 on pages 319-320.

## REVIEW AND CHALLENGE



1. In the Math Links 9 text, complete Chapter 8 Review pages 330-331 #1, 2, 3, 5, 6, 10, 11, 14, 15.

2. In the Math Links 9 text, do Chapter 8 Practice Test pages 332-333 #1, 2, 5, 6, 15.