# 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.



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).



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.



### 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.



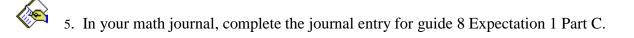
2. Watch and take notes on instructional video on Solving One Step Equations



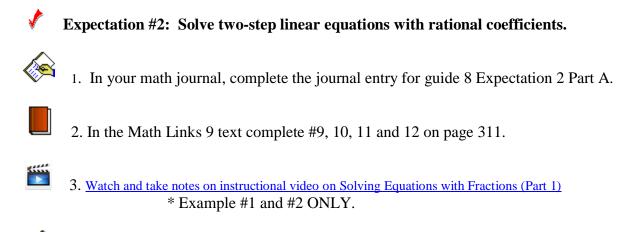
3. In your math journal, complete the journal entry for guide 8 Expectation 1 Part B.

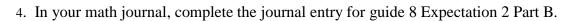


4. In the Math Links 9 text, work through example #2 on page 297. Now complete # 8 and #9 on page 301.



- 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.





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. <u>Watch and take notes on instructional video on Solving Multiple Step Equations</u> \* 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. <u>Watch and take notes on instructional video on Solving Equations with Fractions (Part 2)</u> \* 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.