

The Common Denominator

A Family Math Newsletter

Pre-Algebra Unit 3: Expressions, Equations
and Inequalities

$$\begin{array}{ccccccc} & \text{coefficient} & & \text{variable} & & \text{constant} & \\ & 5 & & x & & 7 & \\ & \swarrow & & \searrow & & \swarrow & \searrow \\ & \text{expression} & & & & \text{expression} & \\ & \underbrace{\hspace{1.5cm}} & & & & \underbrace{\hspace{1.5cm}} & \\ & & & \text{equation} & & & \\ & & & \text{Terms: } 5x, 7, 32 & & & \end{array}$$

Unit at a Glance

Skills/ Topics:

- Write and solve two-step equations and inequalities with rational coefficients.
- Graph proportional relationships interpreting the unit rate as the slope.
- Use similar triangles to explain why the slope is the same between any two distinct points.
- Represent linear non-proportional relationships in tables, graphs, and with equations.
- Write and solve linear multi-step equations.
- Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions.



Length: 45 minutes: 30 days; 90 minutes: 15 days

Exploring Mathematics

Careers:

[Career Options: Business Manager, Computer Programmer, Engineer](#)

Math @ Home:

[Two-Step Equations](#)
[Algebraic Equations](#)



Resource Toolkit

HMH Resources

Module 6: Expressions and Equations pg. 167-198
Module 7: Inequalities pg. 199-229
Module 16: Proportional Relationships pg. 497-522
Module 17: Nonproportional Relationships pg. 523-554
Module 18: Solving Linear Equations pg. 555-591

Discovery ED Techbook Info

Grade 7

Equivalent Expressions concepts 5.1, 5.2, and 5.3
Equations and Inequalities concepts 6.1 and 6.2

Grade 8

Introduction to Functions concepts 7.1, 7.2, 7.3, and 7.4
Linear Relationships concepts 8.1 and 8.2

Homework Help Section

Open Up Resources

Unit 6 All Lessons and Practice Problems

“Whether you think you can or you cant, you are right”

- Henry Ford