

Lesson 5-8 Solving Equations by multiplying by fractions

Mr. Marroquin's 7th Grade Pre-Algebra Class

Use multiplication to undo multiplication

normally how done?

$$5a = \frac{1}{7}$$

- Multiply both sides by the reciprocal of the coefficient and following any rules you have already learned.

Examples (2)

$$8x = \frac{5}{7}$$

$$2y = \frac{7}{9}$$

Fractions as the coefficient

$$\frac{2}{9}t = \frac{5}{6}$$

- Multiply each side by the reciprocal of the coefficient

Examples (2)

$$\frac{9}{13} = -\frac{6}{11}S$$

$$\frac{2}{3}x = -8$$

What if there is a mixed number?

- Steps (2)
 - Convert mixed numbers to improper fractions
 - Perform inverse operations then solve & simplify

$$1\frac{1}{2}m = 1\frac{3}{4}$$

Writing Equations involving fractions

- Your teacher needs a shelf to hold a set of textbooks **one and five-eighths** of an inch thick. How many books will fit if the shelf is **26 inches long**?
- Variable: ← Represents _____
- Equation:

In class / Homework

- Class: PB 5-8
- HW: Page 262 49-53 all (Word problems)
