

Lesson : 4-5 Fraction Equations

SWBAT: Solve equations containing fractions by using inverse operations.

Inverse Operations:

Operations that _____ (cancel out).

- Addition and subtraction
- Multiplication and division

Whole number equations:

- Remember to solve for a variable we need to get it alone on one side of the equation (Isolate the variable).
- To do this we need to use _____.

Ex: $x + 4 = 38$ - If you see addition we must now subtract 4 from both sides

Solve these equations using inverse operations:

a. $x - 3 = 7$

b. $n + 4.5 = 10.8$

c. $5p = 75$

d. $a \div 0.3 = 1.4$

Fraction Equations:

- Do the same thing as the _____ equations, use inverse operations.

Ex: $y + \frac{1}{5} = \frac{3}{5}$

- The operation is addition, so I need to subtract to solve

Solve these addition and subtraction inverse operation problems:

a. $m - \frac{2}{7} = \frac{1}{3}$

b. $x + \frac{2}{5} = \frac{3}{4}$

c. $d - \frac{6}{9} = \frac{2}{3}$

Lesson : 4-5 Fraction Equations

SWBAT: Solve equations containing fractions by using inverse operations.

- You will still do the same with multiplication and division. Use inverse operations!

Ex: $\frac{2}{7}x = \frac{1}{3}$ - I see multiplication, so I am going to divide by $\frac{2}{7}$

Solve the following equations with multiplication and division:

a. $m \div \frac{3}{10} = \frac{5}{18}$

b. $\frac{4}{15}y = \frac{2}{5}$

c. $d \div \frac{6}{12} = \frac{4}{9}$

Extra problems:

$$x - \frac{1}{3} = \frac{5}{6}$$

$$n + \frac{1}{3} = \frac{11}{12}$$

$$\frac{2}{5} + a = \frac{13}{20}$$

$$\frac{2}{3}y = 8$$

$$\frac{4}{5}m = \frac{16}{35}$$

$$\frac{x}{2} = 15$$