

**Solving
Equations**

LEQ: Which inverse operation do you use to solve an equation?

steps:

1. Box the Variable.

$$-15 = \boxed{-4m} + 5$$

2. Perform the Inverse Operation.

$$\begin{array}{r} -15 = -4m + 5 \\ -5 \quad -5 \\ \hline -20 = -4m \end{array}$$

$$\frac{-20}{-4} = \frac{-4m}{-4}$$

$$-4 \quad -4$$

3. Solve.

$$5 = m$$

4. Check.

$$-15 = -4(5) + 5$$

$$-15 = -20 + 5$$

$$-15 = -15 \quad \checkmark$$

**We Do
Together**

$$10 - 6v = -104$$

**Solving
Equations**

LEQ: Which inverse operation do you use to solve an equation?

steps:

1. Box the Variable.

$$-15 = \boxed{m} + 5$$

2. Perform the Inverse Operation.

$$\frac{-15(3)}{3} = m + 5$$

$$\frac{-75}{-5} = \frac{m + 5}{-5}$$

3. Solve.

$$-80 = m$$

4. Check.

$$-15 = -80 + 5$$

**We Do
Together**

$$10 - 6v = -104$$

$$\frac{-15}{3} = \frac{-75}{3}$$

$$-15 = -15 \checkmark$$

**olving
quations**

LEQ: How can you solve an equations with fractions using the LCM?

**steps
using
the LCM**

1) Find LCM

$$\frac{2}{7}x + \frac{3}{4} = \frac{1}{2}$$

**2) Multiply the LCM
by each term**

$$\overset{(28)}{2} \frac{2}{7}x + \overset{(28)}{3} \frac{3}{4} = \overset{(28)}{1} \frac{1}{2}$$

$$\overset{(4)}{(28)} \frac{2}{7}x + \overset{(7)}{(28)} \frac{3}{4} = \overset{(14)}{(28)} \frac{1}{2}$$

3) Simplify

$$\begin{aligned} (4)2x + (7)3 &= (14)1 \\ 8x + 21 &= 14 \end{aligned}$$

4) Solve

$$8x + 21 = 14$$

$$\underline{-21 = -21}$$

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

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

LCM

2	4	7
4	8	14
6	12	21
8	16	28
10	20	
12	24	
14	28	
16		
18		
20		
22		
24		
26		
28		

We Do Together

1) Find LCM

$$\left(-\frac{11}{15}x + \frac{4}{5} = \frac{1}{3}\right)$$

LCM = 15

2) Multiply the LCM by each term

$$\overset{(15)}{-}\frac{11}{15}x + \overset{(15)}{4} = \overset{(15)}{1}\frac{1}{3}$$

3) Simplify

$$(1)(-11x) + (3)(4) = (5)(1)$$

4) Solve

$$-11x + 12 = 5$$

5) Box the variable, perform the inverse, check your answer.

$$\begin{array}{r} \boxed{-11x} + 12 = 5 \\ \underline{-12 \quad -12} \\ -11x = -7 \\ \underline{-11 \quad -11} \end{array}$$

$$x = \frac{7}{11}$$

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tions

LEQ: Which inverse operation do you use to solve an equation?

steps
olving
ti-step
ations

1. Distributive Property/
Combine Like Terms

$$-15 = 2(m - 3m) + 5$$

$$\longrightarrow -15 = 2m - 6m + 5$$

2. Box the Variable

$$\longrightarrow -15 = \boxed{-4m} + 5$$

$$-5 \qquad -5$$

3. Perform the Inverse
Operation.

$$\longrightarrow \frac{-20}{-4} = \frac{-4m}{-4}$$

$$-4 \qquad -4$$

4. Solve

$$\longrightarrow 5 = m$$

We Do Together

$$2(6v-10) + 10 = -104$$