$$(x+1)(2x-4)\left(\frac{1}{x+1}\right)=(x+1)(2x-4)\left(1-\frac{5}{2x-4}\right)$$

$$2x-4=(x+1)(2x-4)-5(x+1)$$

$$2x-4=2x^2-2x-4-5x-5$$

$$0=2x^2-9x-5$$

$$0=(2x+1)(x-5)$$

1st 9 weeks equations project

10-9-15, 5th period
by David, Bekah,and Jennifer

$$3\sqrt{x}=9$$

$$\sqrt{x}=\frac{9}{3}=3$$

$$(\sqrt{x})^2=(3)^2$$

$$x=9$$

Introduction

The objective of this project is to show that we know how to write equations ,properties of real number ,and property of equality.

In mathematics, an **equation** is an equality containing one or more variables. Solving the equation consists of determining which values of the variables make the equality true. In this situation, variables are also known as unknowns and the values which satisfy the equality are known as solutions.

1.

SOLVING EQUATIONS

$$\frac{4x = 2/5 \cdot 1/4}{4}$$

$$x = \frac{2/20}{2}$$

$$x = 1/10$$

I HAD THE EQUATION 4X=2/5 . FIRST I DID THE MULTIPLICATIVE INVERSE AND DIVIDED BY 4. THEN, I TIMESED 2/5 BY 1/4 .AFTER THAT, I GOT 2/20 .FINALLY, I DIVIDED 2/20 BY 2 AND GOT MY ANSWER WHICH IS X= 1/10.

2.

X- 1/4 =2/5 .4 8/20

+1/4 +1/4 .5 + 5/20

X= 13/20

X= 1 7/13

13

1

13 | 20

-13

7

I had the equation x-1/4 =2/5. First I used the addition property of equality and added 1/4 to 2/5 but since they didn't have the same dominator I had to multiply by the dominators so they would match. After that I finally got I had to divide because I couldn't get a whole #. After that I finally got my answer x=1 and 7/13ths

3.

$15-\frac{2}{3}x=20$

$-15 \quad -15$

$0-\frac{2}{3}x=5$

$3/2 * \frac{2}{3}x=5/1*3/2$

$15/2=71/2$

first that we have an equation we subtract the 15 with the 20. Then that we have the fraction and variable . we want to keep flip it change it. we multiply 3/2 with ⅔ and the same on the other side 3/2 * 5/1 and we get 7 ½ .

4.

5-2(x-3)=-23

5-2x-6 =-23

taking

+5 +5

-2x-6 =-18

+6 +6

-2x = -6

-2 -2

x=3

My equation was 5-2(x-3)=-23. The first step was to use distributive property, by 2 and multiplying it by x and 3. Then you have to add five because you have to do the opposite.

writing equation

lois has 45 toy airplane in his collection,and bob has 21.If luis buys 6 more new toy air planes each month and bob buy 2 new each month ,after how many months will lois and bob have the same number of airplanes?

$$45+6c=21+4c$$

-4 $\quad$ $-4c$

$45+2c = 21$

-45 $\quad$ -45

$2c = -24$

$c = -12$