Teacher De La Mora **Subject** __Algebra Support__ **Dates**__4/27-5/1 (Week 2)__ **7-12 Weekly Planner** *Welcome to our Distance Learning Classroom!*
Student Time Expectation per day: 30 minutes

Content Area & Materials	Learning Objectives	Tasks	Check-in Opportunities	Submission of Work for Grades
Digital (If you can work digitally, please do. It will help to keep us all safe ☺) • Khan Academy (KA) Access Code Period 1: **9EWGP5FX** Period 2: **KGZG4TPE** • EdPuzzle (EP) Access Code Period 1: **BERONVU** Period 2: **TAVWAFA**	Suggested Order / Pacing Review • Dividing By Zero (Monday) • Equations w/ variables on both sides (Tuesday) • Equations w/ variables on both sides: Fractions (Wednesday) • Number of Solutions to Equations (Thursday) • Equations with no sol/infinitely many (Friday)	• Students are to complete the assigned **Khan Academy and EdPuzzle Assignments.**	Mrs. De La Mora is available during the office hours at the times indicated below. • 10:00 am-12:00 pm Monday-Friday • Remind App CODE: **dk4g79** • adelamora@tusd.net	• KA / EP assignments will be **recorded with the highest scores attained**
Hard Copy (Please only use this if you do not have technology available) • Notes + Examples • Assignments	Suggested Order / Pacing Review • Dividing By Zero (Monday) • Equations w/ variables on both sides (Tuesday) • Equations w/ variables on both sides: Fractions (Wednesday) • Number of Solutions to Equations (Thursday) • Equations with no sol/infinitely many (Friday)	• Students are to **read** the lesson and examples provided • On a separate sheet of paper for each assignment, **complete** ALL problems showing your work.	Mrs. De La Mora is available during the office hours at the times indicated below. • 10:00 am-12:00 pm Monday-Friday • Remind App CODE: **dk4g79** • adelamora@tusd.net	• Group your work together for your math class **IN ORDER**, and with the following labels clearly displayed: **Student Name:** **Teacher Name:** **Class Name/Subject:** **Period:** **Assignment Week #** • ***Assignments will be scored on accuracy.***
Scheduled, *if possible,* • Discussion	Zoom classes can be held during tutoring hours. Schedule your meetings by visiting the class website: **kimballmath.wordpress.com** Discussions will revolve around discovery and application of concepts assigned for the week.			
Scaffolds & Supports	KA assignments can often be re-tried to improve learning. Videos are utilized to demonstrate not only key concepts, but also frequent points of errors, helping students avoid pitfalls.			

Teacher Office Hours *2 hours daily (all classes):* • Contact • Platform	Monday	Tuesday	Wednesday	Thursday	Friday
	10:00 am-12:00 pm	**10:00 am-12:00 pm**	**10:00 am-12:00 pm**	**10:00 am-12:00 pm**	**10:00 am-12:00 pm**

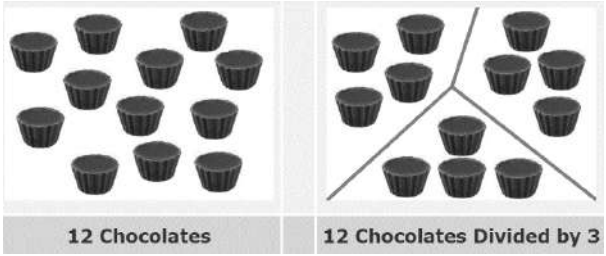
Student Name: **Teacher Name:** **Class Name/Subject:** **Algebra Support** **Period:** **Assignment Week #: 2**	NOTES: Complete all work on a separate sheet of paper. Include the heading provided on each worksheet you turn in. Show all work.

Monday

Dividing

To see why, let us look at what is meant by "division":
Division is splitting into equal parts or groups.
It is the result of "fair sharing".

Example: There are 12 chocolates, and 3 friends want to share them, how do they divide the chocolates?



12 Chocolates	12 Chocolates Divided by 3

So, they get 4 each: 12/3 = 4

Now, let us try dividing the 12 chocolates among zero people, how much does each person get?

Does that question even make sense? No, of course it doesn't.

We can't share among zero people, and we can't divide by 0. If we multiply 1/0 by zero we could get 0 or 1. In fact, we can't have both possibilities, so we **cannot** define 1/0 to be a number.

So, it is **undefined**.

Tuesday

Multi-Step Equations
(Variables on Both Sides)

Steps to Solve:	
①	Simplify each side of the equation if needed. (Distribute/Combine)
②	Use inverse operations to move variables to one side.
③	Sovle the remaining equation.
④	Check your solution!

Examples

Directions: Solve each equation. Check all solutions.

1. $8x+17=2x+35$

$-2x \quad -2x$

$6x+17=35$

$-17 \quad -17$

$\frac{6x}{6}=\frac{18}{6}$

$x=3$

2. $7k+8=2k-37$

$-2k \quad -2k$

$5k+8=-37$

$-8 \quad -8$

$\frac{5x}{5}=\frac{-45}{5}$

$X=-9$

3. $m+3=9m-13$

$-m \quad -m$

$3=8m-13$

$+13 \quad +13$

$\frac{16}{8}=\frac{8m}{8}$

$2=m$

4. $-4y+6=-3y+12$

$+4y \quad +4y$

$6=y+12$

$-12 \quad -12$

$-6=y$

Watch the signs!

It's okay to have rational answers.

Always check your work.

Wednesday

Clearing the Fractions

Rather than working with the fractions, it can be easier to use a process called *clearing the fractions*. **Steps to solve:**

1. Identify the **least common denominator** (LCD).
2. Multiply the entire equation by the LCD. This will clear the fractions.
3. Solve the remaining equation.
4. Check your solution!

If you do not multiply by the LCD then you'll need to **simplify** your final answer.

Check your work!

Examples

Directions: Solve each equation by clearing the fractions.

5. $\left[\frac{13}{7}x+\frac{4}{7}=-\frac{9}{7}\right]\cdot 7$ LCD? 7

$13x+4=-9$
$-4 \quad -4$
$\frac{13x}{13}=\frac{-13}{13}$
$x=-1$

6. $\left[\frac{3}{2}a-2=-\frac{13}{4}\right]\cdot 4$ LCD? 4

$6a-8=-13$
$+8 \quad +8$
$\frac{6a}{6}=\frac{-5}{6}$
$a=\frac{-5}{6}$

7. $\left[\frac{101}{20}=\frac{13}{10}w+\frac{15}{4}\right]\cdot 20$ LCD? 20

$101=26w+75$
$-75 \quad -75$
$\frac{26}{26}=\frac{26w}{26}$
$1=w$

8. $\left[7n-\frac{1}{2}=\frac{20}{9}\right]\cdot 18$ LCD? 18

$126n-9=40$
$+9 \quad +9$
$\frac{126n}{126}=\frac{49}{126}$
$n=\frac{7}{18}$

10. $\left[\frac{11}{12}=\frac{3}{2}x+\frac{5}{3}\right]\cdot 12$ LCD? 12

$11=18x+20$
$-20 \quad -20$
$\frac{-9}{18}=\frac{18x}{18}$
$-\frac{1}{2}=x$

Thursday

Types of Solutions

Most equations we have solved so far have only one solution. However, there are **two special cases:** no solution and infinite solution. Solve the equations below to see what happens.

	One Solution	No Solution	Infinite Solution
	$3(2x+9)=-5-2x$ $6x+27=-5-2x$ $+2x \quad +2x$ $8x+27=-5$ $-27 \quad -27$ $\frac{8x}{8}=\frac{-32}{8}$ $x=-4$	$7x-9-3x=4(x+3)+1$ $4x-9=4x+12+1$ $4x-9=4x+13$ $-4x \quad -4x$ $-9 \neq 13$	$-2(3x-5)=2x+10-8x$ $-6x+10=-6x+10$ $+6x \quad +6x$ $10=10$
What does this mean?	This is the **ONLY SOLUTION** that will make the equation true.	There is **NO SOLUTION** that will make the equation true. **Symbol:** $\varnothing$	**ALL SOLUTIONS** will make the equation true. **Symbol:** ∞

Friday

Directions: Solve each equation. Check all solutions.

1. $5x-3=3(2x-1)-x$

$5x-3=6x-3-x$
$5x-3=5x-3$
$-5x \quad -5x$
$-3=-3$
∞

2. $2n-5=9n+37$

$-2n \quad -2n$
$-5=7n+37$
$-37 \quad -37$
$\frac{-42}{7}=\frac{7n}{7}$
$-6=n$

3. $2(4-a)=-2(a-8)$

$8-2a=-2a+16$
$+2a \quad +2a$
$8 \neq 16$
$\varnothing$

4. $4(2k-3)+1=8k-11$

$8k-12+1=8k-11$
$8k-11=8k-11$
$-8k \quad -8k$
$-11=-11$
∞

Student Name:
Teacher Name:
Class Name/Subject: Algebra Support
Period:
Assignment Week #: 2

Complete all work on a separate sheet of paper. Show all work. Include the heading provided on each worksheet you turn in.

Monday

1.) What values of x make the ratio undefined?

$$\frac{3}{x}$$

2.) Simplify the expression. Find the values of x that make the ratio undefined.

$$\frac{(x+3)(x+3)}{x+3}$$

3.) What values of x make the ratio undefined?

$$\frac{1}{x^2}$$

4.) What values of x make the ratio undefined? (Hint: Factor)

$$\frac{1}{x^2-4}$$

5.) Simplify the expression. Find the values of x that make the ratio undefined.

$$\frac{1}{2x-1}$$

6.) Simplify the expression. Find the values of x that make the ratio indeterminate?

$$\frac{0}{2x-1}$$

Tuesday

1.) Solve for b. Check your work.

a) $4b+5=1+5b$

b) $4b-4=5b-8$

c) $2b+4=10+5b$

d) $2-2b=3b+17$

2.) Solve for a. Check your work.

a) $5+14a=9a-5$

b) $a-15=4a-3$

c) $12a-4=14a-10$

d) $-3+5+6a=11-3a$

3.) Solve for n. Check your work.

a) $16-2n=-3n+6n+1$

b) $16-2n=n+9+4n$

c) $9n+4=-5n+14+13n$

d) $17-2n=2n+5+2n$

Student Name: **Teacher Name:** **Class Name/Subject:** **Algebra Support** **Period:** **Assignment Week #:** **2**	**Complete all work on a separate sheet of paper. Show all work. Include the heading provided on each worksheet you turn in.**

Wednesday

1.) Solve for s. Check your work.

a) $0.5s + 1 = 7 + 4.5s$

b) $4s + 5 = 2 + 3.25s$

c) $2s + 4 = 10 + 2.5s$

d) $4s + 8 = 7.2 + 5s$

2.) Solve for m. Check your work.

a) $12 - \frac{1}{5}m = 2r + 1$

b) $15.3 + m = 1.3 - m$

c) $3.26d + 9.75d - 2.65$

d) $-\frac{1}{4}m - 4 = \frac{7}{4}m - 3$

Thursday/Friday

1.) How many solutions does the following equation have? Explain your reasoning and show your work.

$$3(x + 5) = -4x + 8$$

2.) How many solutions does the following equation have? Explain your reasoning and show your work.

$$-6(x + 7) = -4x - 2$$

3.) How many solutions does the following equation have? Explain your reasoning and show your work.

$$3(y + 9) = 12y + 13$$

4.) How many solutions does the following equation have? Explain your reasoning and show your work.

$$5x + 8 - 7x = -4x + 1$$

5.) How many solutions does the following equation have? Explain your reasoning and show your work.

$$-6y + 13 + 9y = 8y - 3$$

6.) Which of the following equations have exactly one solution? Choose all the answers that apply. Justify how you know.

a) $2x - 31 = 2x - 31$

b) $2x - 31 = -2x - 31$

c) $2x + 31 = 2x - 31$

d) $2x - 2 = 2x - 31$