	3.3 – Solving S	Systems of Equ	ations by Elimination	1
Write your questions and thoughts here!	Proview of the Lesson:			
•	rieview of the Lesson.			
	1.			
	2.			
	3.			
	II. WHAT IS A SYSTEM OF EQUATIONS?			
	III WHAT IS THE SOLUTION TO A SYSTEM OF FOULATIONS?			
	a. $2x + 3y = 12$ 2x + 4y = 16	b.	-7x + 2y = 15 6x + 4y = 24	
	Eliminating Variableslooking for opposites!			
	c. 5x + 2y = 10	d.	7x - 4y = -28	
	-5x + 4y = 30		3x + 4y = 12	



MULTIPLYING AN EQUATION BY A CONSTANT TO ELIMINATE A VARIABLE 6x + 3y = 24f. x + 2y = 3 e. 2x + 3y = -12x – 8y = - 16 -5x + 4y = 206x - 4y = -24g. h. 15x + 9y = -459x - 2y = 181. Add/subtract by \_\_\_\_\_\_terms. 2. Remember to include \_\_\_\_\_\_ sides of the equation when multiplying. V. STEPS FOR SOLVING SYSTEMS OF EQUATIONS ALGEBRAICALLY BY ELIMINATION: **VI. GUIDED EXAMPLES:** You try 1. 3x + 2y = 152. -2x - 6y = -6-3x + 5y = 62x + y = 9Check your answers:





Processing/Summary Time!

Take a moment to review your notes, write a summary of what you learned in the video.

Write your questions in the column to the left  $\odot$ 

Solving Systems of Equations by Elimination

Name\_\_\_

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Solve each system by elimination.

1) $4x - 6y = -12$	2) $-6x + 8y = 2$
-4x - 2y = 28	6x - 5y = -8
3) $-5x - 7y = -12$	4) $7x - 8y = -8$
7x - 7y = 0	7x - 5y = 16
5) $-6x - 2y = -4$	6) $-4x + 4y = 8$
-12x - 5y = -13	9x - 8y = -13
7) $3x + 6y = 6$	8) $10x + 5y = 25$
10x + 10y = -20	-7x - 3y = -18
9) $5x + 15y = 20$ -27 $y = 9x$	10) -10x - 4y = 4 -5x - 2y = 2

Date\_\_\_\_\_ Period\_\_\_\_

## **Application and Extension**

## **Solving Systems of Equations by Elimination**

1. Kris spent \$131 on shirts. Blue shirts cost \$28 and red cost \$15. If he bought a total of 7 then how many of each kind did he buy?

2. Albert is a server at an all-you-can eat sushi restaurant. At one table, the customers ordered 4 child buffets and 1 adult buffet, which cost a total of \$86. At another table, the customers ordered 4 child buffets and 3 adult buffets, paying a total of \$130. How much does the buffet cost for each child and adult?