

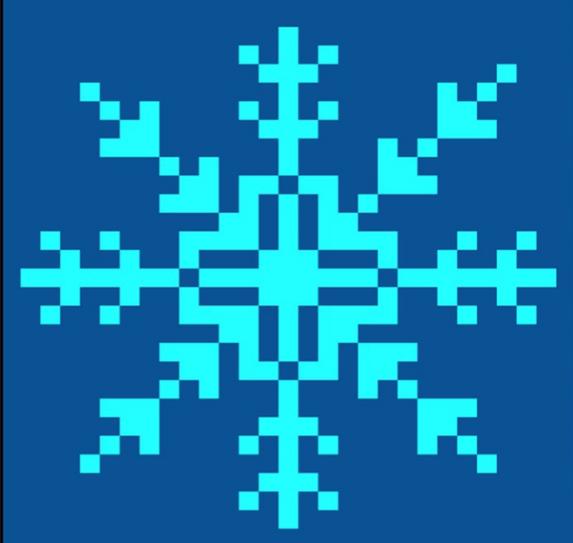
SYSTEMS OF EQUATIONS BY SUBSTITUTION

keep scrolling to get
a sneak peek!

Help your 8th grade or Algebra 1 students practice solving systems of equations using substitution. Students will be eager to get the self-checking benefits from this digital pixel art activity!

#	Question	Answer	#	Questions	Answer
1	$y = -2x + 13$ $y = 4x - 11$		6	$y = 2x - 9$ $-x - 6y = -11$	
2	$y = -3x - 3$ $y = 7x + 17$		7	$4x - 5y = 21$ $x - 3y = 21$	
3	$y = 5x - 22$ $7x - 7y = 14$		8	$2x + y = 25$ $3x - 2y = 13$	
4	$-9x - 4y = 0$ $y = -5x + 11$		9	$-2x - 7y = 7$ $-8x + y = -1$	
5	$-6x + 2y = -4$ $y = -9x + 10$		10	$2x + 10y = -20$ $x + 8y = -10$	

Directions: Solve each system of equations using substitution. Type your answer as an ordered pair with no spaces and the picture will



(c) Malia Rivera 2020



© Malia Rivera, 2023

Why do you need this?

Solving Systems of Equations by Substitution Pixel Art



It's self-checking! Your students will instantly know if they are correct or not.



Help your students practice this essential math skill.



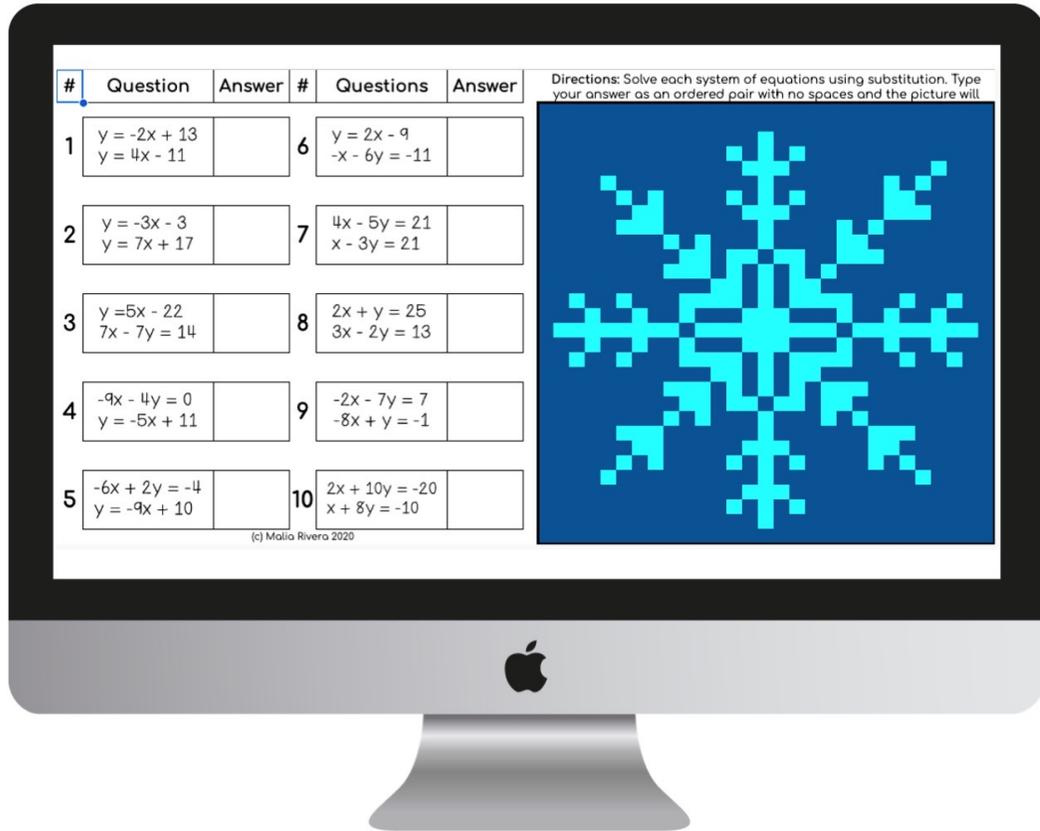
Your students will be so engaged trying to figure out what the picture is!

Directions: Solve each system of equations using substitution. Type your answer as an ordered pair with no spaces and the picture will

#	Question	Answer	#	Questions	Answer
1	$y = -2x + 13$ $y = 4x - 11$		6	$y = 2x - 9$ $-x - 6y = -11$	
2	$y = -3x - 3$ $y = 7x + 17$		7	$4x - 5y = 21$ $x - 3y = 21$	
3	$y = 5x - 22$ $7x - 7y = 14$		8	$2x + y = 25$ $3x - 2y = 13$	
4	$-9x - 4y = 0$ $y = -5x + 11$		9	$-2x - 7y = 7$ $-8x + y = -1$	
5	$-6x + 2y = -4$ $y = -9x + 10$		10	$2x + 10y = -20$ $x + 8y = -10$	

(c) Malia Rivera 2020

Systems of Equations by Substitution Pixel Art includes:



- ✓ 10 self-checking problems
- ✓ an answer key
- ✓ a self-checking version
- ✓ an assessment version

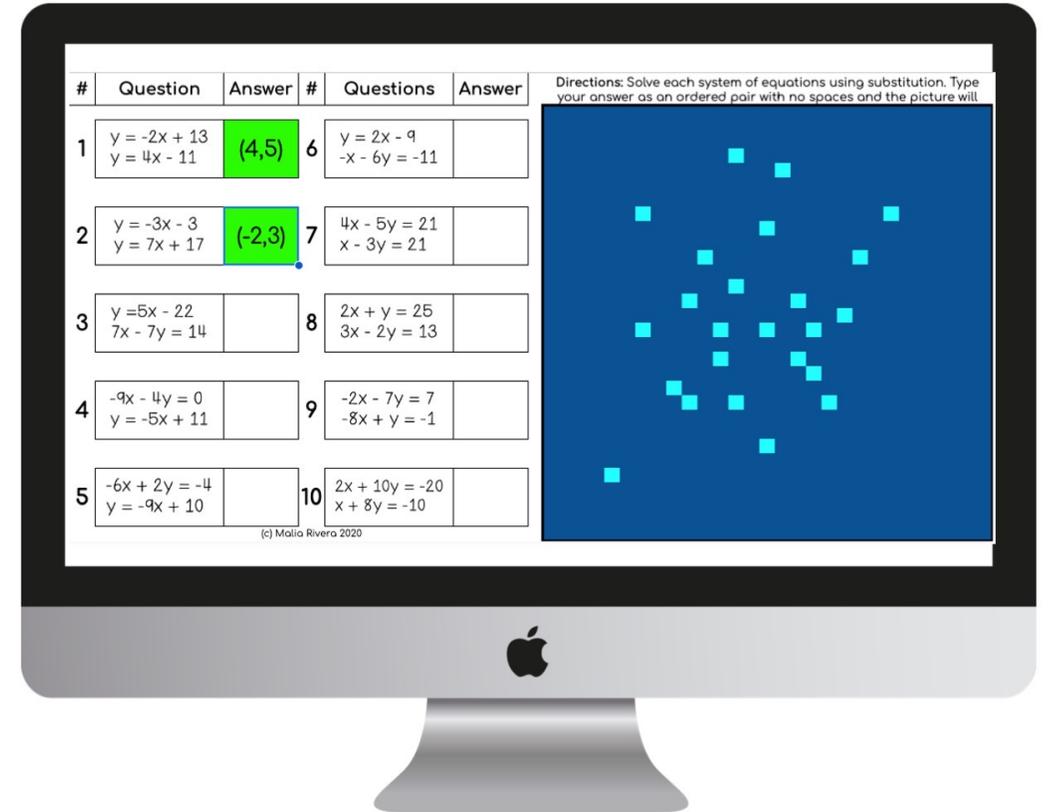
Systems of Equations by Substitution Pixel Art

standards covered:

CCSS: HSA-REI.C.6

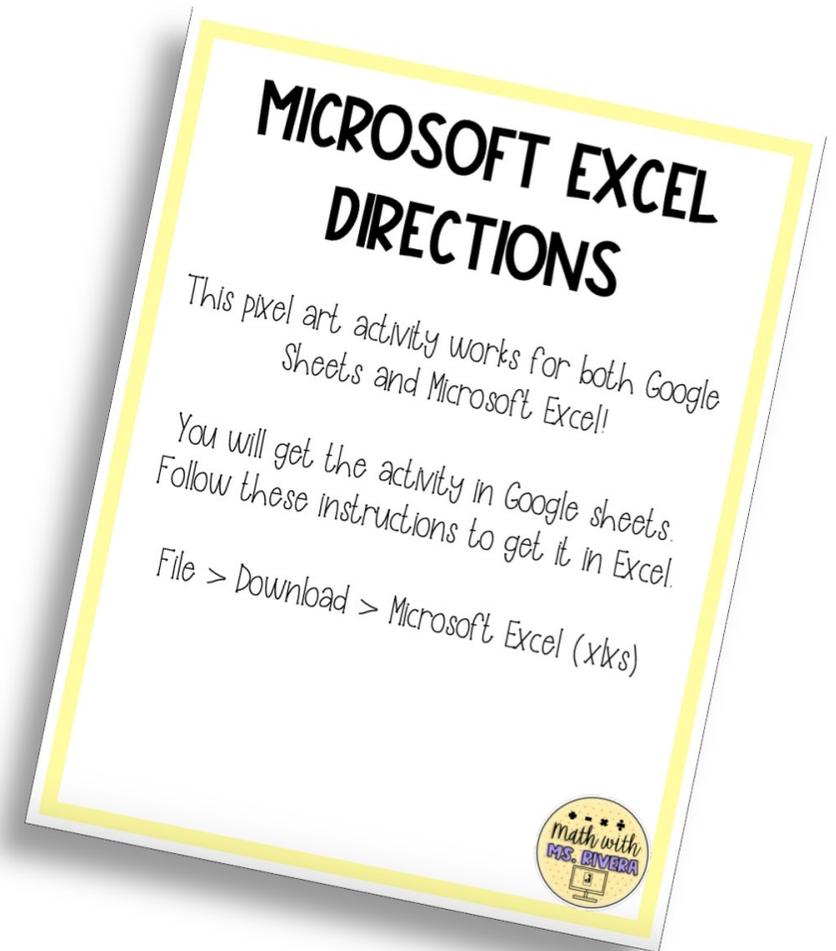
TEKs: A1.3.F

VA SOLs: EI.A.4.d



Systems of Equations by Substitution Pixel Art

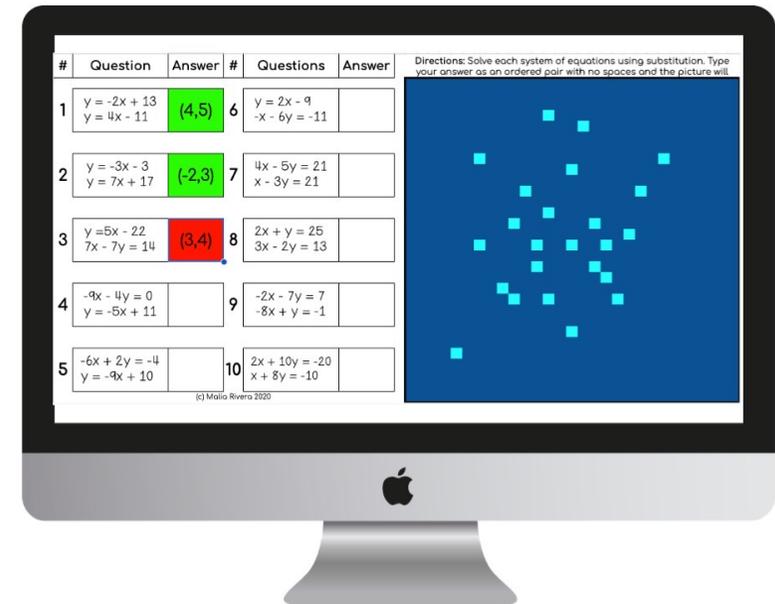
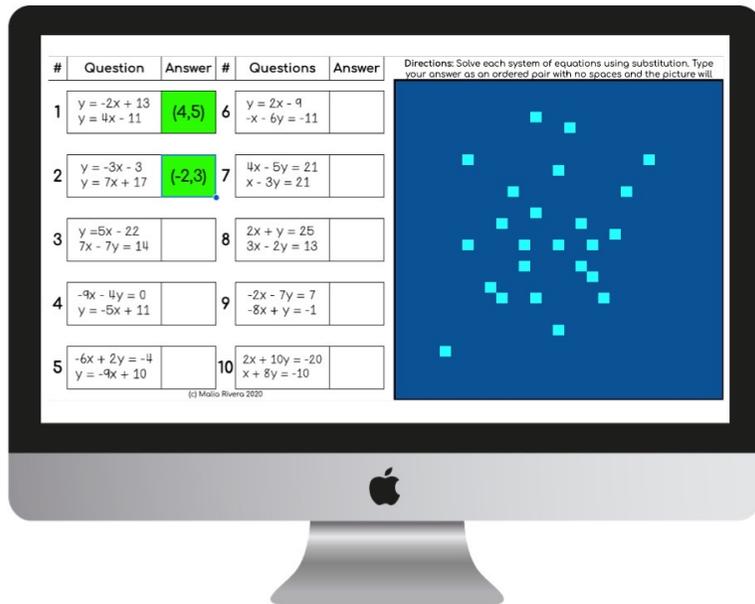
Can be used with Google Sheets
and Microsoft Excel
Directions included!



Systems of Equations by Substitution Pixel Art

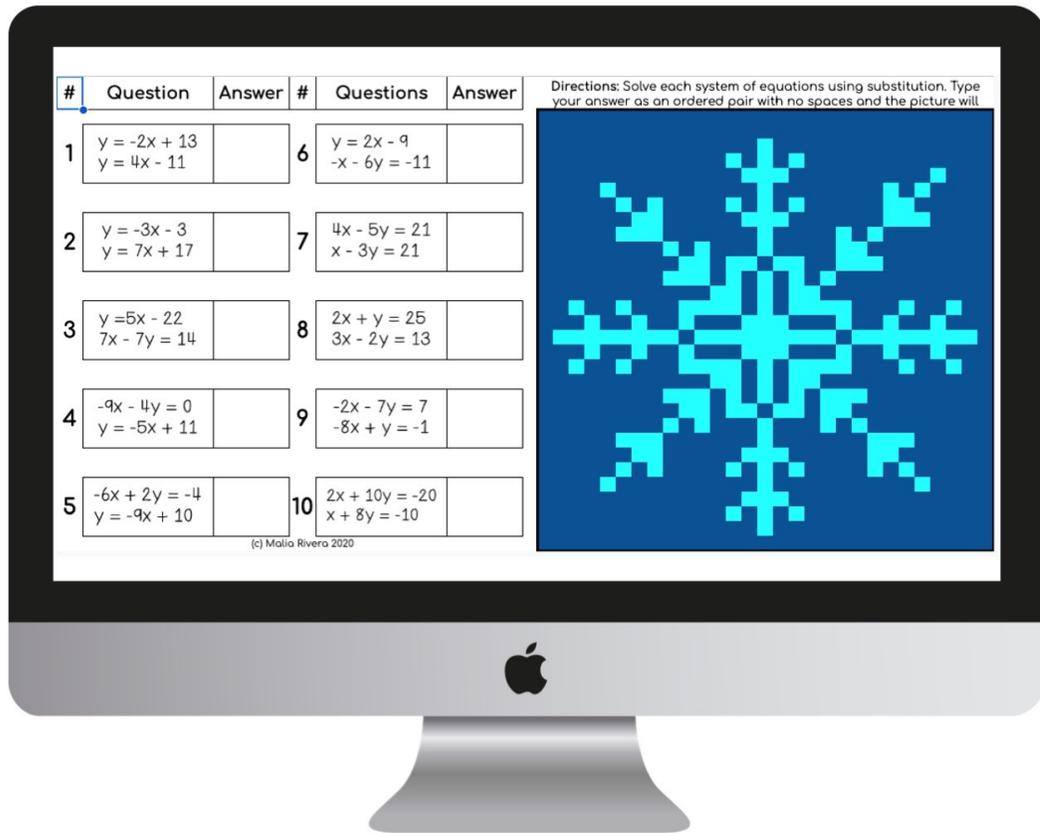
If they answer it correctly, some of the pixels will appear.

If they answer it incorrectly, the answer box will turn red & no pixels appear.



Your students will *love* trying to figure out what the picture is WHILE doing math!

how to use this resource



This is a great activity to use when reviewing how to solve systems of equations using the substitution method.

It can be used right after teaching the concept or as homework.

This is also a **substitute-friendly** assignment!

Check out what *other teachers* are saying:



"Excellent resource. I loved the immediate feedback students go so they knew whether their answer was correct or not. Allowed them to ask for help without doing multiple problems incorrectly before they realized they didn't understand."

- Heidi M.



"My students love this resource and they enjoy practicing this activity together."

- Enas O.

You may also enjoy ...

SYSTEMS OF EQUATIONS MIXED REVIEW Choice Board

KEY Date: _____ Period: _____ Name: _____

Systems of Equations Choice Board
Directions: Choose _____ problems from each column. Show your work in the blank space.

By Substitution	By Elimination	By Graphing	By Substitution
$y = -6x + 14$ $3x + 7y = -19$ $3x + 7(-6x + 14) = -19$ $3x - 42x + 98 = -19$ $-39x + 98 = -19$ $-39x = -117$ $x = 3$ $y = -6(3) + 14$ $y = -18 + 14$ $y = -4$ (3, -4)	$x - 7y = 18$ $x + 4y = -11$ $x - 7y = 18$ $x + 4y = -11$ $-11y = 29$ $y = -2.63$ $x = 10.37$ (10.37, -2.63)	$y = 1/4x - 2$ $y = x + 1$ $1/4x - 2 = x + 1$ $1/4x - x = 3$ $-3/4x = 3$ $x = -4$ $y = 1/4(-4) - 2$ $y = -1 - 2$ $y = -3$ (-4, -3)	$y = -6x + 14$ $3x + 7y = -19$ $3x + 7(-6x + 14) = -19$ $3x - 42x + 98 = -19$ $-39x + 98 = -19$ $-39x = -117$ $x = 3$ $y = -6(3) + 14$ $y = -18 + 14$ $y = -4$ (3, -4)

© Malia Rivera, 2021

SYSTEMS OF EQUATIONS TYPES OF SOLUTIONS

drag & drop the correct type of solution to each system.

$x + y = -2$ $y = -x + 5$	INFINITELY MANY	INFINITELY MANY
$3x - y = -9$ $3x + 5y = -15$	NO SOLUTION	ONE SOLUTION
$-9x + 6y = 18$ $6x - 4y = -12$	ONE SOLUTION	NO SOLUTION
$-2x + 2y = -16$ $3x - 6y = 30$	INFINITELY MANY	

© Malia Rivera, 2023

SYSTEM OF EQUATIONS Color by Number Worksheet

SYSTEMS OF EQUATIONS COLOR BY NUMBER
Date: _____ Name: _____

Directions: Solve each system. Circle the answer from the given choices. Your answers will indicate how you color the grid.

$3. 6x + 2y = 30$ $4x - 4y = 8$	$4. 2x + y = 11$ $6x - 2y = 6$	$5. 3x + 2y = 8$ $6x + 4y = -4$
------------------------------------	-----------------------------------	------------------------------------

Key:

(1, 0) red	(-2, 4) yellow	(4, 3) black	no solution light gray	(-3, 0) pink	infinite solutions blue
(2, 0) purple	(-1, 0) black	(-2, -7) dark blue			

Answer key included

© Malia Rivera, 2023

Buy the Bundle & *save!*

This bundle includes 11 digital activities that will allow your students to have fun while solving systems of equations.

There is a mix of pixel art, self-checking, digital task cards, and drag & drop activities in the bundle

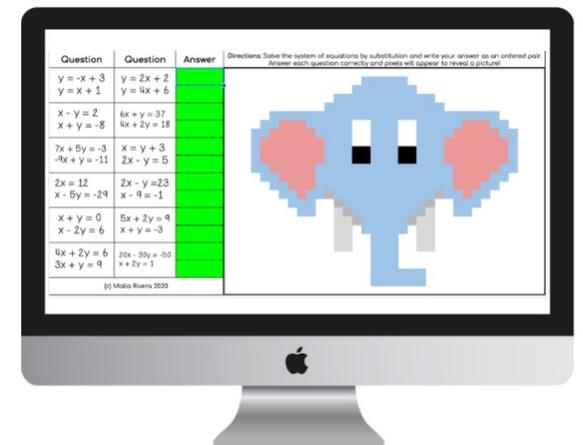
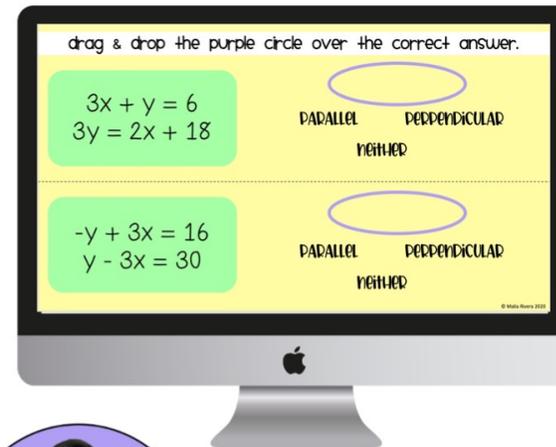
check it out!



SYSTEMS OF EQUATIONS

Digital Activity Bundle

Algebra



© Malia Rivera, 2023



hey there!

My name is Malia and I'm passionate about making learning and practicing math fun. I love creating engaging math resources for my students and I hope your students enjoy this activity too!

Did you know you could get **FREE** money from TPT??

All you need to do is leave feedback on the product after you purchase. [Click here](#) to leave reviews and earn credits towards your next TPT purchase!

let's connect!



Follow my TPT store



Follow my Instagram



Join my FB group