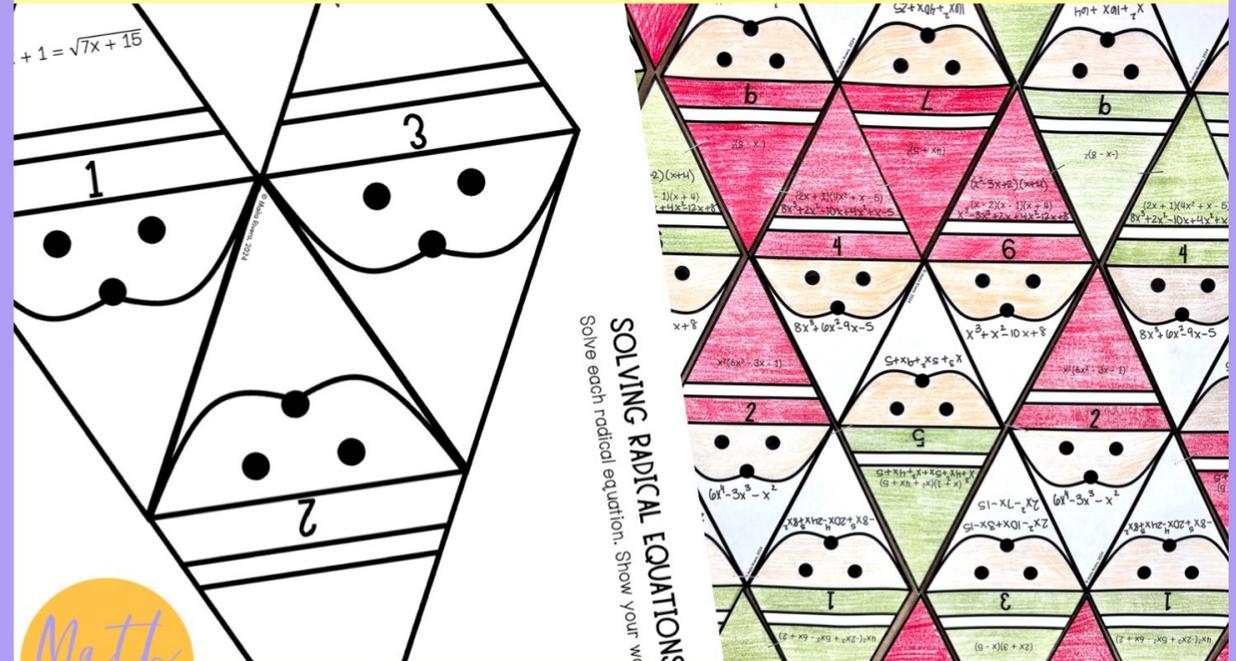


keep scrolling to
get a sneak peek!

If you're looking for a new way to get your students practicing math, this is the resource for you! With this **radical equations** collaborative activity, students will practice solving radical equations with and without extraneous solutions on tessellation piece. Assembling all the students' pieces creates one large holiday tessellation to display on your classroom bulletin board.

SOLVING RADICAL EQUATIONS

Collaborative Tessellation



Christmas Santa Bulletin Board

Solving Radical Equations Collaborative Tessellation

standards covered:

CCSS: HSA-RN.A.2, HSA-REI.A.2

TEKs: A2.4.F, A2.4.G, A2.6.B,
A2.7.H

VA SOLs: EI.All.A.3.d



Solving Radical Equations Collaborative Tesselation

skills included:

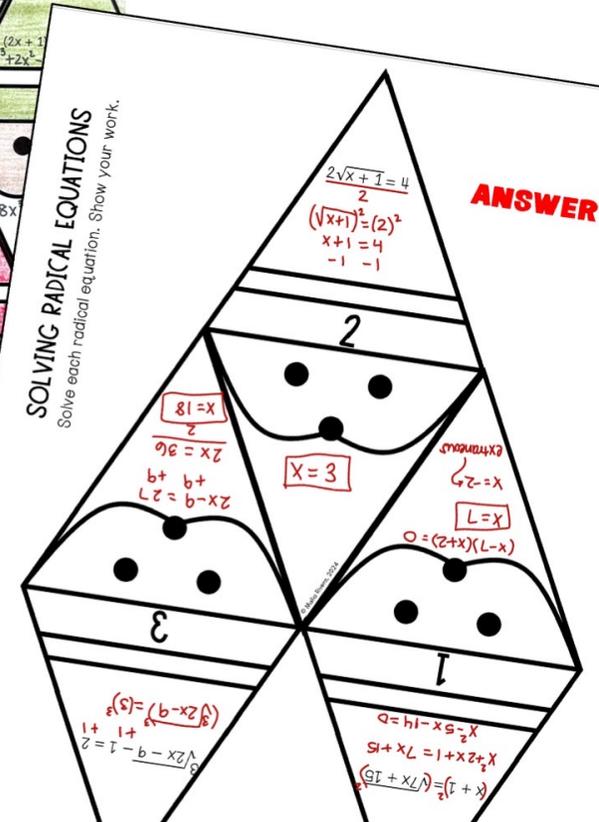
- Radicals on one side
- Radicals on both sides
- Square & Cube roots
- Extraneous solutions



Solving Radical Equations Collaborative Tessellation

Once all the student pieces are finished, it will create one large, holiday tessellation bulletin board display.

Students, Teachers, Staff and Parents will love looking at the holiday display of your students' work on your classroom wall!



how to use this resource



- Print or make copies – I print on white so my students can decorate each piece how they want.
- Students will answer the questions on each Santa (3 per page)
- Collect all the students' pieces & put it up on the bulletin board to create one big, festive Santa design

You may also enjoy ...

SOLVING RADICAL EQUATIONS

KEY: No Solution = N, if it has one solution, type the numerical solution. Keep answers in fraction form, if applicable. Check for extraneous solutions.

Q#	Question	Answer	Q#	Question	Answer	Q#	Question	Answer	Q#	Question	Answer
1	$3\sqrt{x} - 6 = 0$		5	$2\sqrt{x} - 9 = 0$		9	$\sqrt{x} + 2 = \sqrt{x-1}$		13	$\sqrt{6-2x} + 12 = 21$	
2	$\sqrt{3x} + 4 = 16$		6	$\sqrt{3x-2} = \sqrt{x}$		10	$5\sqrt{x-3} + 4 = 14$		14	$\sqrt{\frac{1}{2}x-2} - \sqrt{x-8} = 0$	
3	$\sqrt{5x} + 5 = 0$		7	$\sqrt{3x+8} = \sqrt{x+4}$		11	$\sqrt{5x+9} = 9 - \sqrt{5x}$		15	$\sqrt{21-x} - \sqrt{1-x} = 0$	
4	$\sqrt{x-8} - 4 = -2$		8	$\sqrt{7-2x} = \sqrt{-x+9}$		12	$\sqrt{x-12} - \sqrt{x-8} = 0$		16	$2 - \sqrt{x+1} = \sqrt{x+3}$	

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Self-Checking

SOLVING RADICAL EQUATIONS

Printable Maze

Self-Checking

Period: _____

Name: _____

Directions: Solve each equation & check for extraneous solutions. The answer will lead you to the next question. Don't forget to show your work!

Solving Radical Equations Maze

Directions: Solve each equation & check for extraneous solutions.

Equations in maze:

- $2(x-3)^{\frac{1}{2}} = -12$ (extraneous)
- $2(x+4)^{\frac{2}{3}} = \frac{1}{8}$ (x=60)
- $x = \frac{2}{5}$
- $x = \frac{5}{12}$
- $x = \frac{1}{2}$ (extraneous)
- $2(x-3)^{\frac{1}{2}} = -12$
- $2(x+4)^{\frac{2}{3}} = \frac{1}{8}$
- $x = 8$
- $\frac{3}{2x^4} + 7 = 23$ (x=)

Answer key included

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RADICAL FUNCTIONS

Algebra 2 Guided Notes

SOLVING RADICAL EXPRESSIONS

Directions: Solve each equation. Be sure to check for extraneous solutions.

Equation: $3\sqrt{4-3x} = 21$

Check:

$$\frac{3\sqrt{4-3(-4)}}{3} = \frac{3\sqrt{4-3(-6)}}{3}$$

$$\frac{3\sqrt{4+12}}{3} = \frac{3\sqrt{4+18}}{3}$$

$$\frac{3\sqrt{16}}{3} = \frac{3\sqrt{22}}{3}$$

$$4 = \sqrt{22}$$

Not a solution.

GRAPHING RADICAL FUNCTIONS

Graph a square root function on the coordinate plane.

Equation: _____

Domain: _____

Range: _____

Parent radical function: _____

Equation: _____

Domain: _____

Range: _____

Answer key included

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Free Algebra Activities!

When you join my email list, I'll send you a free Algebra print & digital self-checking activities. There is an Algebra 1 and Algebra 2 version!

You'll also be getting exclusive freebies and content to help your Algebra students be successful this school year!

check it out!

The image shows a collage of algebra worksheets and a digital tablet. The worksheets include:

- Answer Key** for **ADDING & SUBTRACTING RATIONAL EXPRESSIONS** and **SOLVING SYSTEMS OF EQUATIONS**.
- MULTIPLYING & DIVIDING RATIONAL EXPRESSIONS** worksheet with problems like $\frac{x-2}{x^2+2x+1}$.
- SOLVING SYSTEMS OF EQUATIONS** worksheet with problems like $2. 2x - 6y = -18$ and $x = 3y - 4$.

The digital tablet displays a self-checking activity titled **Rational Expression Operations - Addition & Subtraction**. The directions are: "Answer each question and type the question number with the matching answer in the answer column to the right." The activity consists of a table with 8 questions and 8 answers, with a path of colored lines connecting the questions to their corresponding answers.

#	Question	Answer	Type the matching question numbers here
1	$\frac{5}{x} + \frac{3}{x+1}$	$\frac{2x+1}{x+2}$	
2	$\frac{2}{x+4} - \frac{x^2}{x^2-16}$	$-\frac{1}{x^2-1}$	
3	$\frac{x+2}{x^2+4x+4} + \frac{2x}{x+2}$	$\frac{2x^2+2x+5}{x^2+x-2}$	
4	$\frac{x}{x-2} + \frac{3}{x-1}$	$-\frac{x^2+2x-8}{x^2-16}$	
5	$\frac{x}{4x+8} - \frac{1}{x^2+2x}$	$\frac{8x+5}{x^2+1}$	
6	$\frac{x+2}{x-1} + \frac{x-1}{x+2}$	$\frac{x^2-3x+7}{x^2-4}$	
7	$\frac{2x+1}{x^2-4} + \frac{x-3}{x+2}$	$\frac{x^2+2x-6}{x^2-3x+2}$	
8	$\frac{x^2+2x}{x^2-1} - \frac{x+1}{x-1}$	$\frac{x-2}{4x}$	

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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 these too!

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