

keep scrolling to  
get a sneak peek!

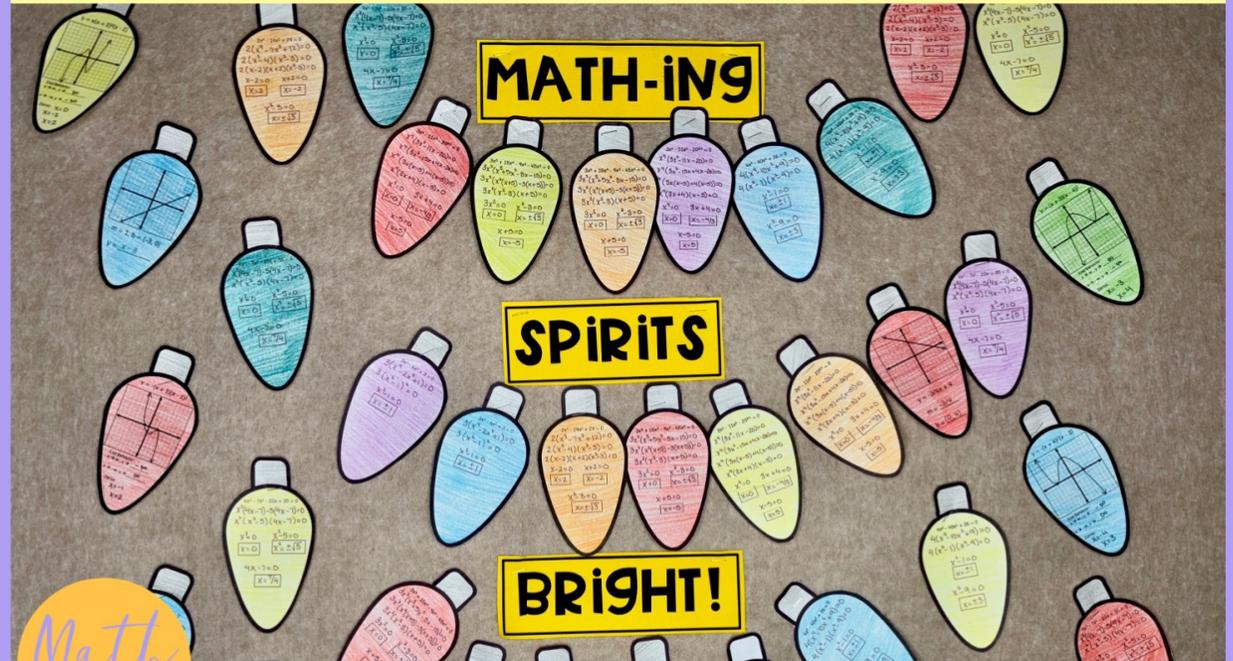
If you're looking for a new way to get your students practicing math, this is the resource for you! With this

### **graphing polynomials**

collaborative activity, students will graph polynomials and identify some key features on the light bulb pieces. Assembling all the students' pieces creates one large holiday display on your classroom bulletin board.

# GRAPHING POLYNOMIAL FUNCTIONS

Holiday Lights



student work bulletin board

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Why do you need this?

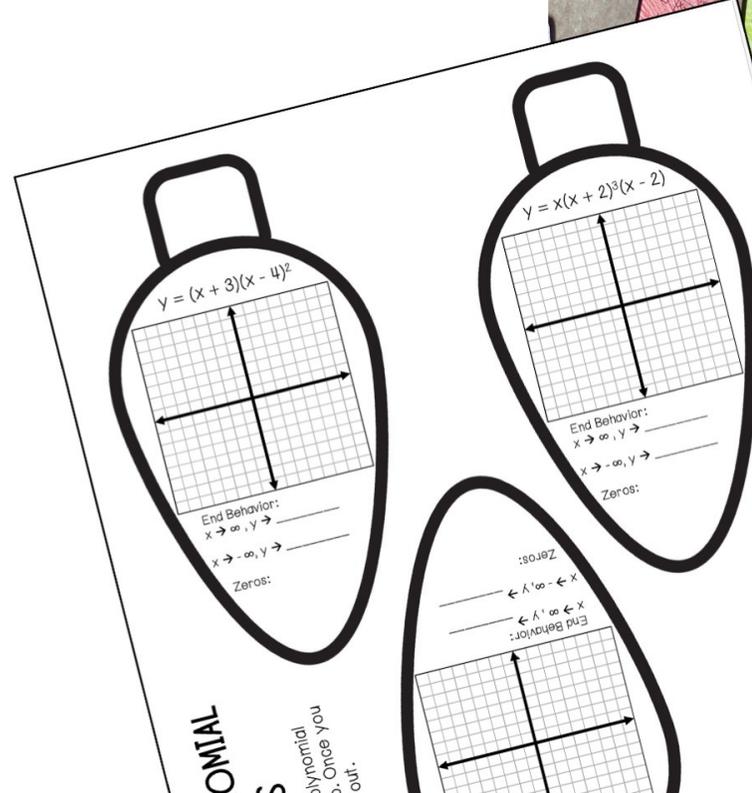
# Graphing Polynomial Functions Holiday Lights Bulletin Board



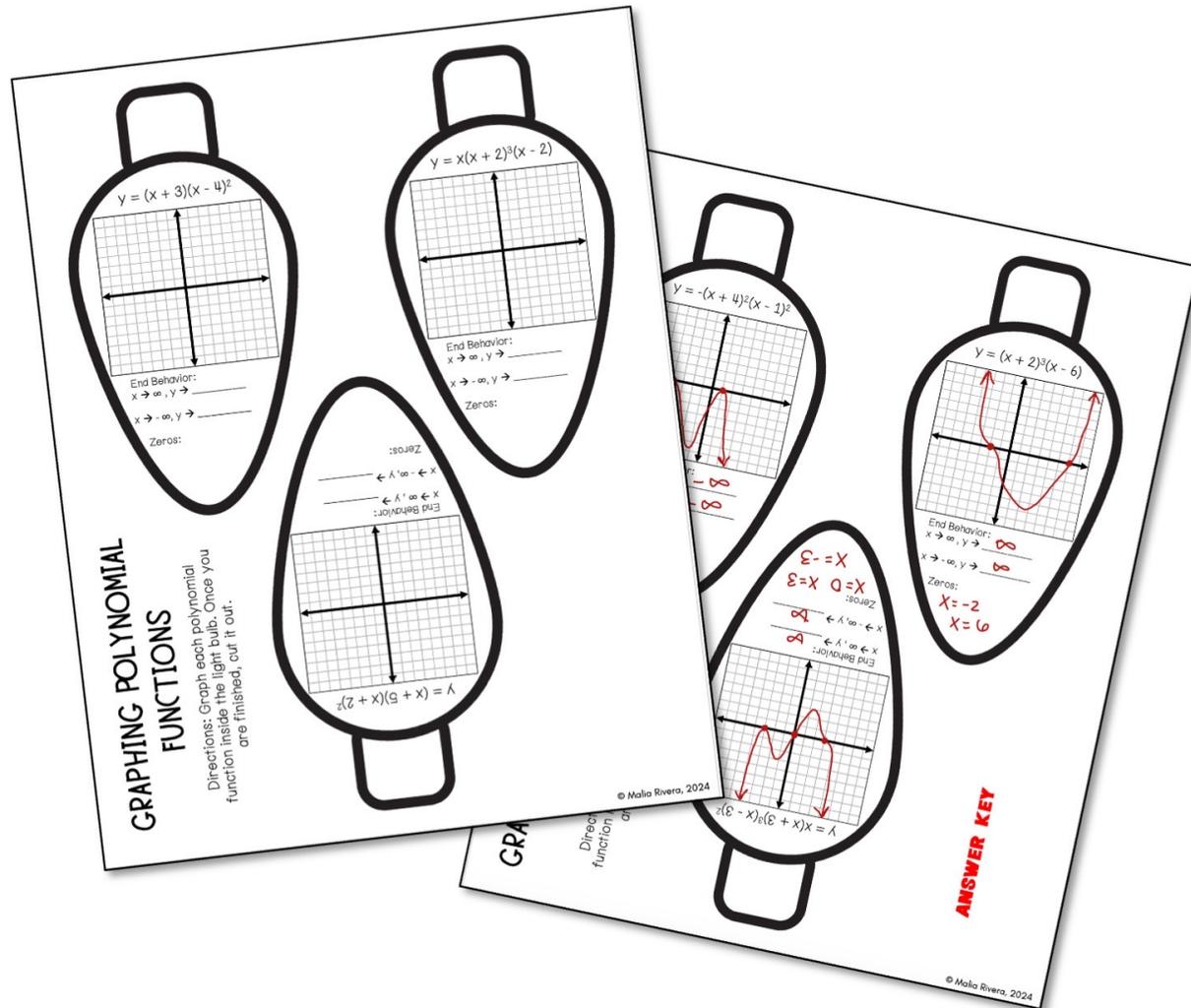
New & engaging way to help students practice graphing polynomial functions



Unique, collaborative way to display student work



# Graphing Polynomial Functions Holiday Bulletin Board *includes:*



✓ 3 blank tessellation pages per student

✓ 9 questions total

✓ an answer key

✓ teacher instructions

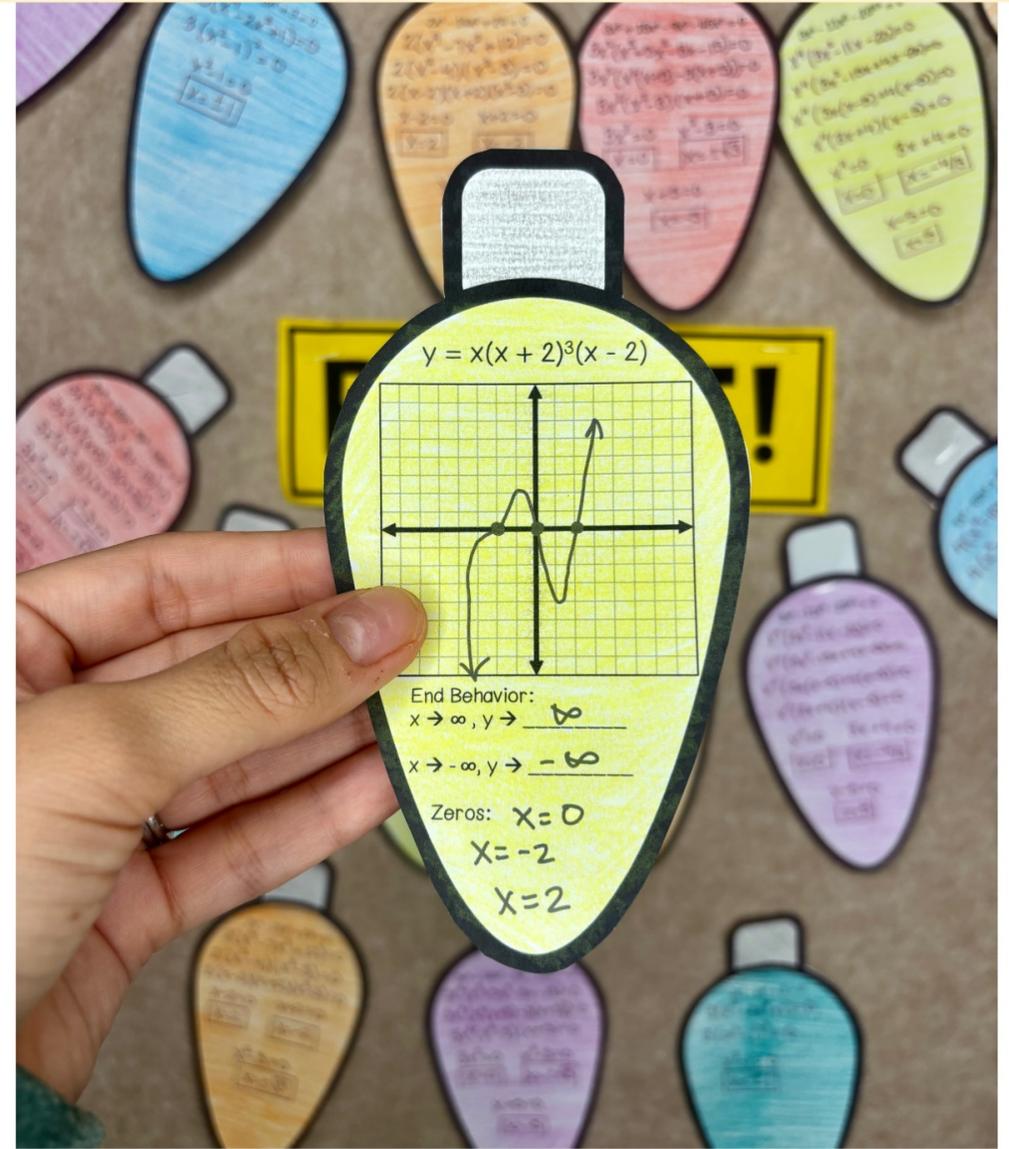
# Graphing Polynomial Functions Holiday Bulletin Board

standards covered:

**CCSS:** HSA-APR.B.3, HSF-IF.B.4

**TEKs:** P.2.F, P.2.I, P.2.J

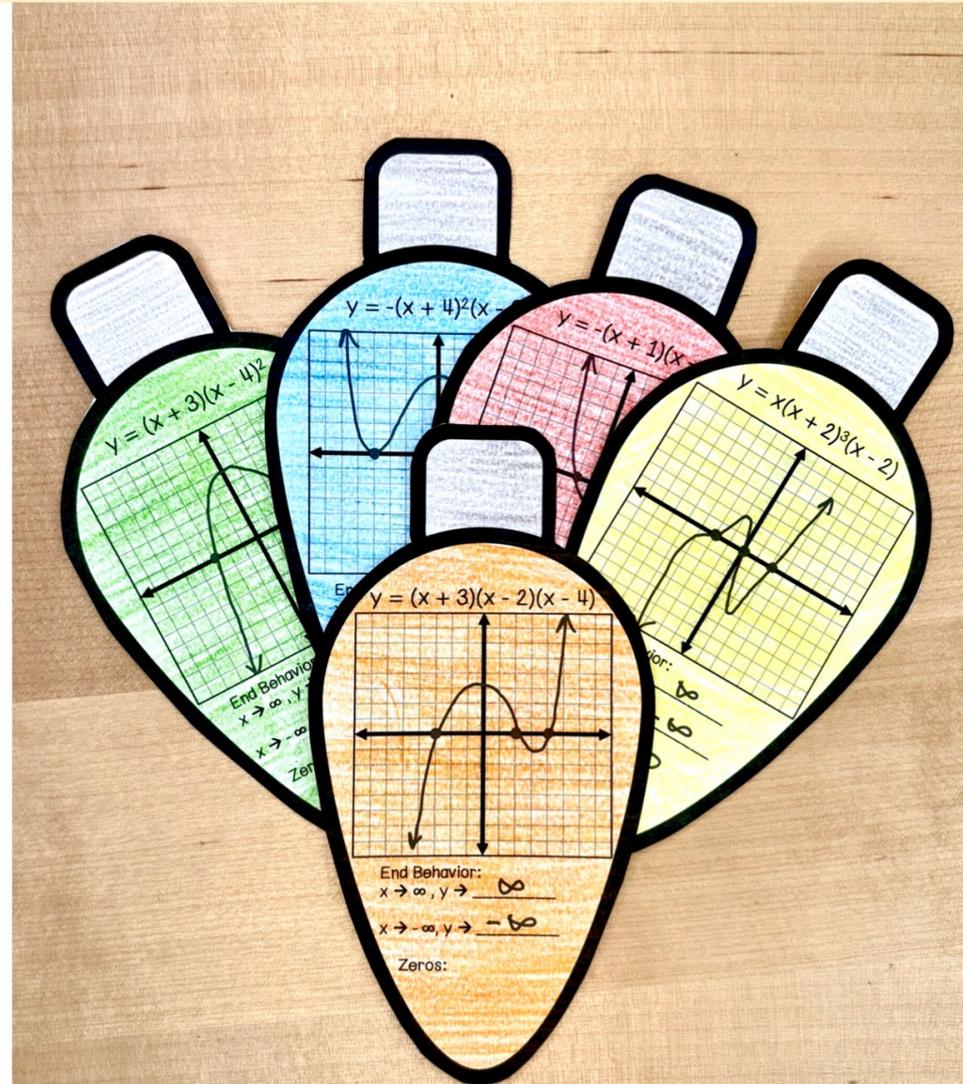
**VA SOLs:** F.All.7deh, F.All.8



# Graphing Polynomial Functions Holiday Bulletin Board

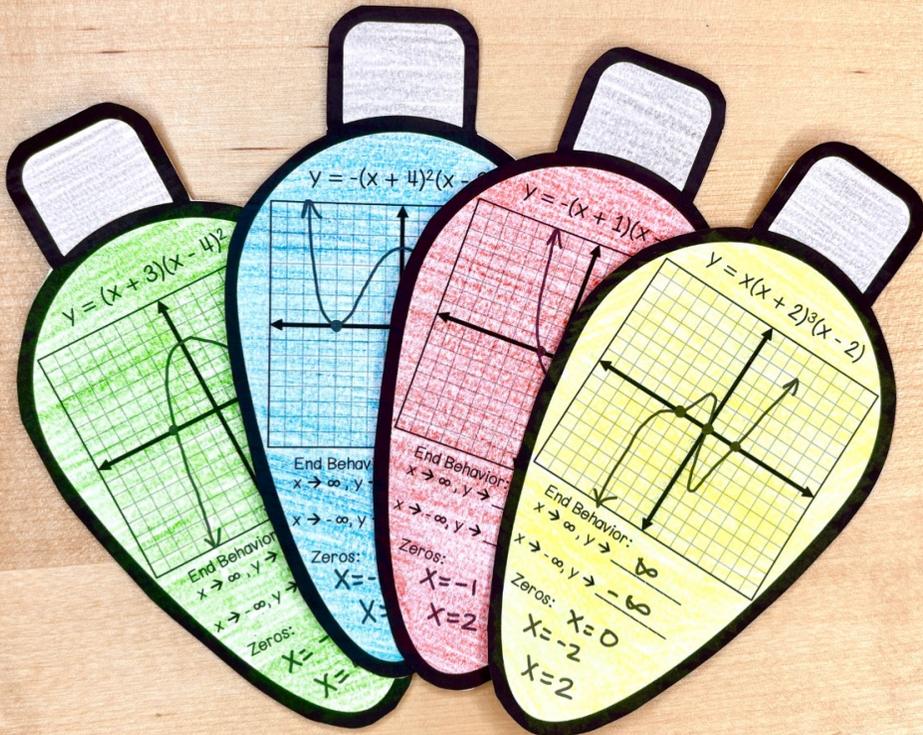
skills included:

- Graphing polynomials given the equation in factored form
- Identifying end behavior
- Identifying zeros
- Graphing based on zeros & multiplicities





# how to use this resource



- Print or make copies – I print on white so my students color it how they want.
- Students will answer the questions on each holiday light.
- Collect all the students' pieces & put it up on the bulletin board to create one big, festive holiday lights design



# 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!

**Answer Key**  
Name: \_\_\_\_\_ Date: \_\_\_\_\_  
**ADDING & SUBTRACTING RATIONAL EXPRESSIONS**  
Directions: Add or subtract the rational expressions. Show your work.

**Solving Systems of Equations**  
Date: \_\_\_\_\_  
Solve systems of equations using substitution or elimination. Check your solution.  
2.  $2x - 6y = -18$   
 $x = 3y - 9$   
4.  $2x + 6y = -1$   
 $y = -2x + 3$

**Answer Key**  
Solving Systems of Equations  
Date: \_\_\_\_\_  
Solve systems of equations using substitution or elimination. Check your solution.  
2.  $2x - 6y = -18$   
 $x = 3y - 9$   
 $2(3y - 9) - 4y = -18$   
 $6y - 18 - 4y = -18$   
 $-18 = -18$   
infinitely many solutions  
 $y = 2 + 5$   
 $y = 7$   
 $(2, 7)$

**Multiplying & Dividing Rational Expressions**  
Date: \_\_\_\_\_  
Directions: Multiply or divide the rational expressions. Show your work.

**Rational Expression Operations - Addition & Subtraction**  
Directions: Answer each question and type the question number with the matching answer in the answer column to the right.

#	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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