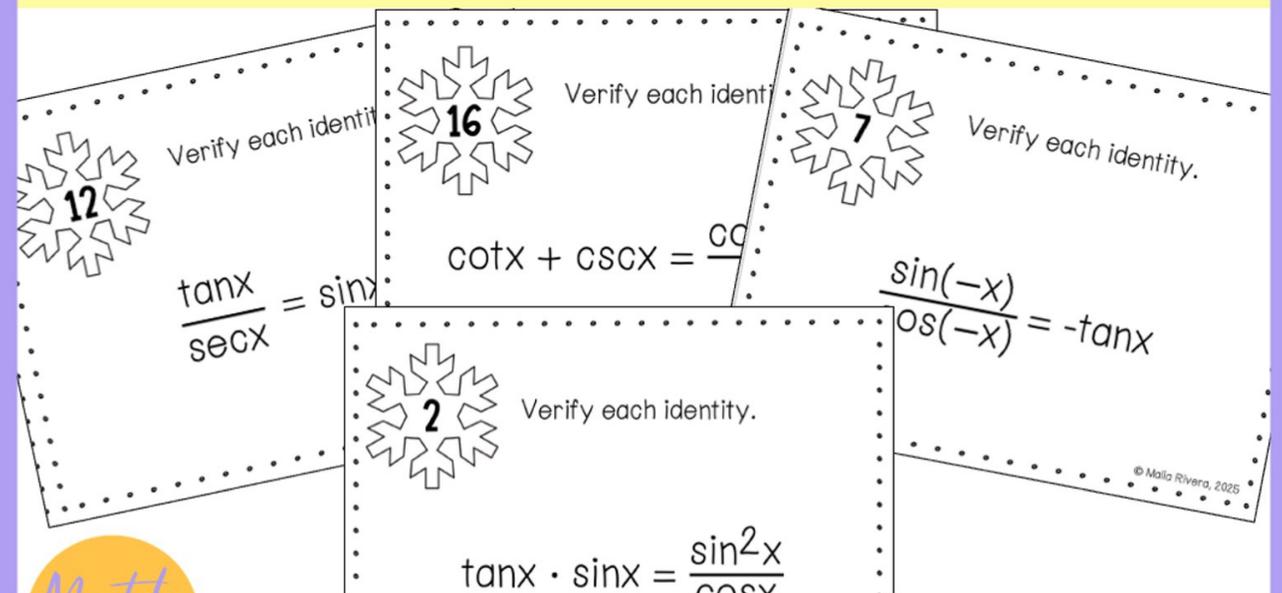


keep scrolling to
get a sneak peek!

Help your Pre Calculus students practice proving trig identities with this task card activity! Your students are going to love this winter themed, self-checking activity!

PROVING TRIG IDENTITIES

Winter Task Cards



16 Skill Based Task Cards

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Why do you need this?



Task cards are an effective, low-prep way to create engaging and interactive learning experience



Task cards are very versatile because they cater to a wide range of student needs

Proving Trig Identities ask Cards

Name _____ Date: _____ Class: _____

VERIFYING TRIG IDENTITIES TASK CARDS

Directions: Prove each identity. Show your work in the boxes below.

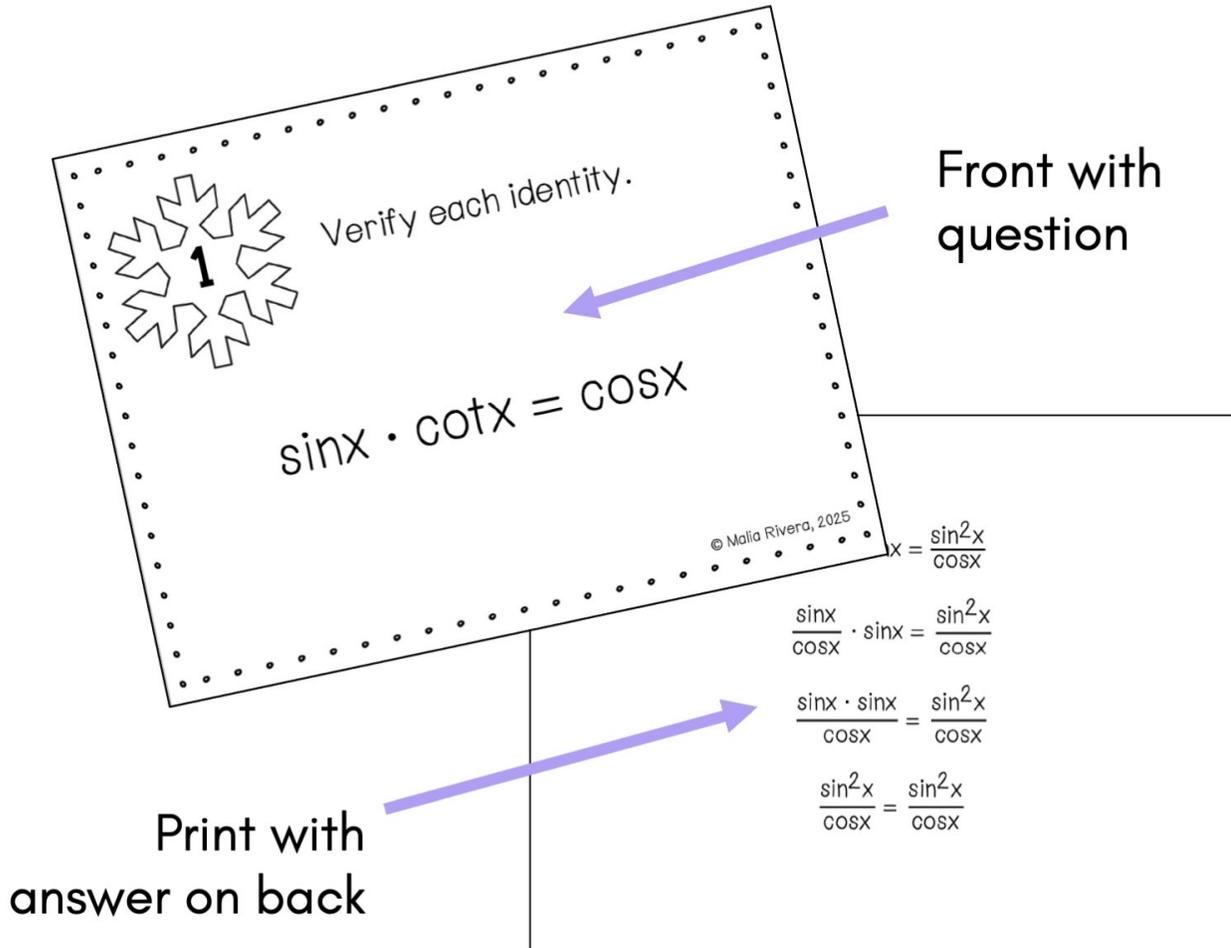
| | | | |
|----|----|----|----|
| 1. | 2. | 3. | 4. |
| 5. | 6. | 7. | |

Card 6: Verify each identity.
$$\frac{1 + \tan^2 x}{\sec^2 x} = 1$$

Card 15: Verify each identity.
$$\frac{\sin x}{\csc x} = \sin^2 x$$

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Proving Trig Identities Task Cards *includes:*



- ✓ set of 16 task cards
- ✓ a recording sheet for students to show their work
- ✓ worked out solutions
- ✓ Printing tips to print the answers on the back of the corresponding question cards

Proving Trig Identities Task Cards

standards covered:

CCSS: HSA.SSE.A.2,
HSA-SSE.B.3, HSF-TF.C.8

TEKs: P.5.M

VA SOLs: EI.T.5

Verify each identity.

$$\frac{1 + \tan^2 x}{\sec^2 x} = 1$$

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$$x = \frac{\sin^2 x}{\cos x}$$
$$\frac{\sin x}{\cos x} \cdot \sin x = \frac{\sin^2 x}{\cos x}$$
$$\frac{\sin x \cdot \sin x}{\cos x} = \frac{\sin^2 x}{\cos x}$$
$$\frac{\sin^2 x}{\cos x} = \frac{\sin^2 x}{\cos x}$$

how to use this resource

Name _____ Date: _____ Class: _____

VERIFYING TRIG IDENTITIES TASK CARDS

Directions: Prove each identity. Show your work in the boxes below.

| | | | |
|----|----|----|----|
| 1. | 2. | 3. | 4. |
| | | | |
| | | | |
| | | | |

TIPS FOR USE

When printing this set of task cards, be sure to select "short-edged binding" when printing on both sides. This will allow the answers to be printing on the back of the corresponding card.

After printing, I highly recommend laminating the task cards to they can be used in the future.

15

Verify each identity.

$$\frac{\sin x}{\csc x} = \sin^2 x$$

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This is a great individual practice activity to use when reviewing how to prove trig identities.

You can also use this in small groups, match centers, or as a scavenger hunt.

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

You may also enjoy ...

TRIGONOMETRY IDENTITIES

Algebra 2 Guided Notes

TRIG IDENTITIES

Reciprocal Identities

| | |
|---------------------------------------|---|
| $\cos \theta = \frac{1}{\sec \theta}$ | $\tan \theta = \frac{\sin \theta}{\cos \theta}$ |
| $\sec \theta = \frac{1}{\cos \theta}$ | $\cot \theta = \frac{\cos \theta}{\sin \theta}$ |

Quotient Identities

| | |
|---|---|
| $\tan \theta = \frac{\sin \theta}{\cos \theta}$ | $\cot \theta = \frac{\cos \theta}{\sin \theta}$ |
|---|---|

Pythagorean Identities

| | |
|---|---|
| $\sin^2 \theta + \cos^2 \theta = 1$ | $\sin^2 \theta + \cot^2 \theta = \csc^2 \theta$ |
| $\cos^2 \theta + \tan^2 \theta = \sec^2 \theta$ | $1 + \cot^2 \theta = \csc^2 \theta$ |

Answer key included
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TRIGONOMETRY

Algebra 2 Guided Notes

GRAPHING SINE & COSINE

Directions: Draw and label the special right triangle...

FINDING EXACT TRIGONOMETRIC VALUES

Directions: Find the exact value of the trigonometric function...

WRITING TRIGONOMETRIC EQUATIONS FROM GRAPHS

Directions: Write 2 corresponding equations for the given graph...

Answer key included
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END OF YEAR REVIEW TASK CARDS

Trigonometry

29 Solve the equation and give the general solution.

$$2\cos \theta + \sqrt{2} = 0$$

24 Write 2 different equations of the given graph.

36 Identify the amplitude, period, phase shift and midline, if possible.

$$y = 2\cot\left(\frac{\pi x}{4}\right) + 1$$

3 Prove: $\sin x \sec x = \tan x$

36 Skill Based Review Task Cards
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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 $2. \frac{x}{x+4} \cdot \frac{x^2}{x^2-16}$.
- 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 | $\frac{x^2+2x}{x^2-1} - \frac{x+1}{x-1}$ | $\frac{x-2}{4x}$ | |

(c) Malia Rivera, 2024



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!

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