Task card 1 Trigonometric Identities

Simplify: $\csc^2 x - 1$

Task card 2 Trigonometric Identities

Simplify: $\cos^2 x - 1$

Task card 3 Trigonometric Identities

Simplify: $(1 - \sin^2 x) / \cos x$

Task card 4 Trigonometric Identities

$\sin \theta = -\frac{3}{5}$ and θ is in quadrant III. Find the exact value of $\cos \theta$.

Task card 5 Trigonometric Identities

Simplify: $\csc^2 x - \cot^2 x$

Task card 6 Trigonometric Identities

Simplify: $\cot x / \csc x$

Task card 7 Trigonometric Identities

Simplify: $\sin x / \tan x$

Task card 8 Trigonometric Identities

$\cos \theta = -\frac{12}{13}$ and θ is in quadrant III. Find the exact value of $\sin \theta$.

Task card 9 Trigonometric Identities

Simplify: $\sec^2 x - 1$

Task card 10 Trigonometric Identities

Simplify:

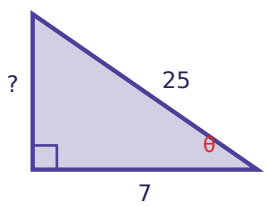
$$\frac{1}{1 + \tan^2 x}$$

Task card 11 Trigonometric Identities

Simplify: $\sec^2 x - \tan^2 x$

Task card 12 Trigonometric Identities

$\cos \theta = \frac{7}{25}$ and θ is in quadrant I. Find the exact value of $\tan \theta$.



Task card 13 Trigonometric Identities

Simplify: $\sin^2 x - 1$

Task card 14 Trigonometric Identities

Simplify: $\cos^2 x \cdot \sec x$

Task card 15 Trigonometric Identities

$\sin \theta = -\frac{8}{17}$ and θ is in quadrant IV. Find the exact value of $\cos \theta$.

Task card 16 Trigonometric Identities

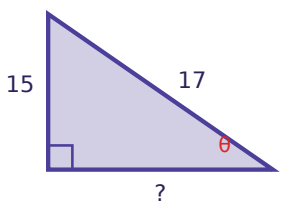
Simplify: $(1 - \cos^2 x) / \sin x$

Task card 17 Trigonometric Identities

Simplify: $(\csc^2 x - 1) \cdot \tan^2 x$

Task card 18 Trigonometric Identities

$\sin \theta = \frac{15}{17}$ and θ is in quadrant I. Find the exact value of $\cos \theta$.



Task card 19 Trigonometric Identities

Simplify: $\sin x \cdot \cos x \cdot \sec x \cdot \csc x$

Task card 20 Trigonometric Identities

Simplify: $(\sec^2 x - 1) \cdot \cot x$

Task card 21 Trigonometric Identities

Simplify: $\cot^2 x \cdot \sin^2 x$

Task card 22 Trigonometric Identities

$\sin \theta = -\frac{5}{13}$ and θ is in quadrant III. Find the exact value of $\tan \theta$.

Task card 23 Trigonometric Identities

$\sin \theta = -\frac{4}{5}$ and θ is in quadrant IV. Find the exact value of $\cos \theta$.

Task card 24 Trigonometric Identities

Simplify: $\tan^2 x \cdot \cos^2 x$

Trigonometric Identities Task Cards

Recording sheet · Grade 12 · Simplify each expression to a single term such as 1, sin x, cos^2 x or -sin^2 x, or find the exact value asked for.

Name: _____ Date: _____

Scan to check your answers

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Trigonometric Identities Task Cards: Answer Key

Grade 12 · Medium

The answers online

1. $\cot^2 x$	**2.** $-\sin^2 x$	**3.** $\cos x$
4. $-\frac{4}{5}$	**5.** 1	**6.** $\cos x$
7. $\cos x$	**8.** $-\frac{5}{13}$	**9.** $\tan^2 x$
10. $\cos^2 x$	**11.** 1	**12.** $\frac{24}{7}$
13. $-\cos^2 x$	**14.** $\cos x$	**15.** $\frac{15}{17}$
16. $\sin x$	**17.** 1	**18.** $\frac{8}{17}$
19. 1	**20.** $\tan x$	**21.** $\cos^2 x$
22. $\frac{5}{12}$	**23.** $\frac{3}{5}$	**24.** $\sin^2 x$