Task card 1 Trigonometric Identities

Simplify: $\sin^2 x + \cos^2 x$

Task card 2 Trigonometric Identities

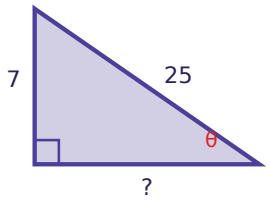
Simplify: $\cot x \cdot \sin x$

Task card 3 Trigonometric Identities

Simplify: $\sec^2 x - 1$

Task card 4 Trigonometric Identities

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



Task card 5 Trigonometric Identities

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

Task card 6 Trigonometric Identities

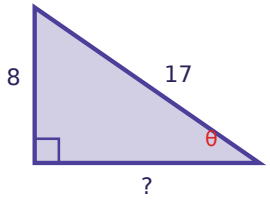
Simplify: $1 - \sin^2 x$

Task card 7 Trigonometric Identities

Simplify: $1 - \cos^2 x$

Task card 8 Trigonometric Identities

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



Task card 9 Trigonometric Identities

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

Task card 10 Trigonometric Identities

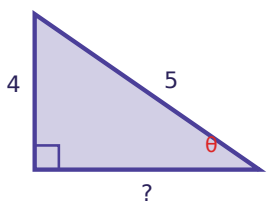
Simplify: $1 + \tan^2 x$

Task card 11 Trigonometric Identities

Simplify: $\sin x / \tan x$

Task card 12 Trigonometric Identities

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



Task card 13 Trigonometric Identities

Simplify: $\cos^2 x - 1$

Task card 14 Trigonometric Identities

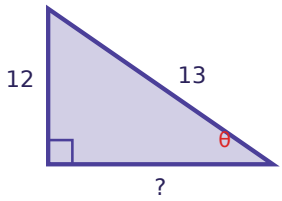
Simplify: $\sin^2 x - 1$

Task card 15 Trigonometric Identities

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

Task card 16 Trigonometric Identities

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



Task card 17 Trigonometric Identities

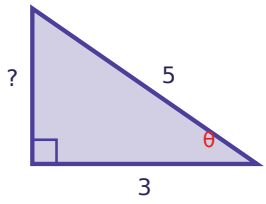
Simplify: $\tan x / \sec x$

Task card 18 Trigonometric Identities

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

Task card 19 Trigonometric Identities

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

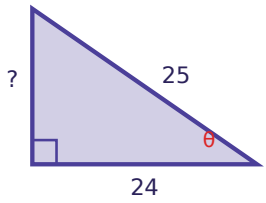


Task card 20 Trigonometric Identities

Simplify: csc x · cos x

Task card 21 Trigonometric Identities

$\cos\theta = \frac{24}{25}$ and θ is in quadrant I. Find the exact value of sin θ.

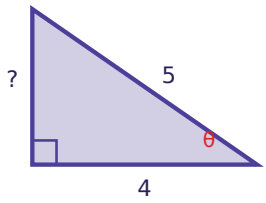


Task card 22 Trigonometric Identities

Simplify: sec x · sin x

Task card 23 Trigonometric Identities

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



Task card 24 Trigonometric Identities

Simplify: cos x · sec 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.

Scan to check your answers

Name: _____ Date: _____

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 · Easy

The answers online

1. 1	**2.** cos x	**3.** $\tan^2 x$
4. $\frac{24}{25}$	**5.** sin x	**6.** $\cos^2 x$
7. $\sin^2 x$	**8.** $\frac{15}{17}$	**9.** 1
10. $\sec^2 x$	**11.** cos x	**12.** $\frac{4}{3}$
13. $-\sin^2 x$	**14.** $-\cos^2 x$	**15.** 1
16. $\frac{12}{5}$	**17.** sin x	**18.** 1
19. $\frac{4}{3}$	**20.** cot x	**21.** $\frac{7}{25}$
22. tan x	**23.** $\frac{3}{4}$	**24.** 1