Task card 1 Solving Trigonometric Equations

Solve: $3 \sin x = \sin x + \sqrt{3}$

Task card 2 Solving Trigonometric Equations

Solve: $4 \tan x = 3 \tan x + \sqrt{3}$

Task card 3 Solving Trigonometric Equations

Solve: $5 \sin x = 3 \sin x + \sqrt{3}$

Task card 4 Solving Trigonometric Equations

Solve: $4 \tan x + 1 = 3 \tan x + 1$

Task card 5 Solving Trigonometric Equations

Solve: $3 \sin x - 5 = 2 \sin x - 5$

Task card 6 Solving Trigonometric Equations

Solve: $4 \sin x + 4 = 3 \sin x + 4$

Task card 7 Solving Trigonometric Equations

Solve: $2 \tan x - 4 = \tan x - 5$

Task card 8 Solving Trigonometric Equations

Solve: $4 \sin x - 2 = 3 \sin x - 2$

Task card 9 Solving Trigonometric Equations

Solve: $3 \cos x + 2 = \cos x + 3$

Task card 10 Solving Trigonometric Equations

Solve: $4 \tan x = 3 \tan x - \sqrt{3}$

Task card 11 Solving Trigonometric Equations

Solve: $4 \tan x + 2 = 3 \tan x + 1$

Task card 12 Solving Trigonometric Equations

Solve: $4 \tan x = \tan x + \sqrt{3}$

Task card 13 Solving Trigonometric Equations

Solve: $3 \tan x = 2 \tan x + \sqrt{3}$

Task card 14 Solving Trigonometric Equations

Solve: $4 \cos x + 6 = 3 \cos x + 7$

Task card 15 Solving Trigonometric Equations

Solve: $3 \cos x + 3 = 2 \cos x + 4$

Task card 16 Solving Trigonometric Equations

Solve: $6 \tan x = 3 \tan x + \sqrt{3}$

Task card 17 Solving Trigonometric Equations

Solve: $3 \tan x - 6 = 2 \tan x - 7$

Task card 18 Solving Trigonometric Equations

Solve: $3 \sin x = \sin x - \sqrt{2}$

Task card 19 Solving Trigonometric Equations

Solve: $4 \sin x = 2 \sin x + \sqrt{2}$

Task card 20 Solving Trigonometric Equations

Solve: $3 \tan x + 1 = 2 \tan x + 2$

Task card 21 Solving Trigonometric Equations

Solve: $3 \cos x - 4 = 2 \cos x - 4$

Task card 22 Solving Trigonometric Equations

Solve: $4 \tan x = \tan x - \sqrt{3}$

Task card 23 Solving Trigonometric Equations

Solve: $5 \cos x = 3 \cos x - \sqrt{3}$

Task card 24 Solving Trigonometric Equations

Solve: $2 \cos x + 1 = \cos x + 1$

Solving Trigonometric Equations Task Cards

Recording sheet · Grade 12 · Solve for x with 0° ≤ x < 360°. Give degrees; write two solutions like x = 30° or x = 150°.

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

Solving Trigonometric Equations Task Cards: Answer Key

Grade 12 · Hard

The answers online

1. x = 60° or x = 120°	**2.** x = 60° or x = 240°	**3.** x = 60° or x = 120°
4. x = 0° or x = 180°	**5.** x = 0° or x = 180°	**6.** x = 0° or x = 180°
7. x = 135° or x = 315°	**8.** x = 0° or x = 180°	**9.** x = 60° or x = 300°
10. x = 120° or x = 300°	**11.** x = 135° or x = 315°	**12.** x = 30° or x = 210°
13. x = 60° or x = 240°	**14.** x = 0°	**15.** x = 0°
16. x = 30° or x = 210°	**17.** x = 135° or x = 315°	**18.** x = 225° or x = 315°
19. x = 45° or x = 135°	**20.** x = 45° or x = 225°	**21.** x = 90° or x = 270°
22. x = 150° or x = 330°	**23.** x = 150° or x = 210°	**24.** x = 90° or x = 270°