Solving Trigonometric Equations

Revise this topic →

← Check your work

This booklet features original exam style questions designed by me. They do not feature in past papers but are good practice for your exams.

The content is designed to reflect the style of the AQA Level 2 Certificate in Further Maths.
It may not be suitable for other courses.

@1stclassmaths

Answer **all** questions in the spaces provided.

1 Solve $\cos x = 0.5$ for $0° \leq x \leq 360°$ **[2 marks]**

Answer

2 Solve $\sin x = \frac{\sqrt{3}}{2}$ for $0° \leq x \leq 360°$ **[2 marks]**

Answer

3 Solve $\tan x = 1$ for $0° \leq x \leq 360°$ **[2 marks]**

Answer

From here on give all answers to 1 decimal place

4   Solve $\cos x = 0.25$ for $0° \le x \le 360°$ **[2 marks]**

Answer _____

5   Solve $\sin x = 0.9$ for $0° \le x \le 360°$ **[2 marks]**

Answer _____

6   Solve $\tan x = 2.2$ for $0° \le x \le 360°$ **[2 marks]**

Answer _____

12

Turn over ►

Do not write outside the box

7   Solve $\cos x = -0.3$ for $0° \le x \le 360°$ **[2 marks]**

_____

_____

_____

_____

Answer _____

8   Solve $\sin x = -0.17$ for $0° \le x \le 360°$ **[2 marks]**

_____

_____

_____

_____

Answer _____

9   Solve $\tan x = -0.4$ for $0° \le x \le 360°$ **[2 marks]**

_____

_____

_____

_____

Answer _____

10 Solve $3\cos x = 1$ for $0° \leq x \leq 360°$ **[3 marks]**

Answer _____

11 Solve $4\tan x = 5$ for $0° \leq x \leq 360°$ **[3 marks]**

Answer _____

12 Solve $3 - \sin x = 3.2$ for $0° \leq x \leq 360°$ **[3 marks]**

Answer _____

$\overline{15}$

Turn over ▶

13   Solve $\cos^2 x = 0.09$ for $0° \leq x \leq 360°$ **[4 marks]**

Answer _____

14   Solve $3\tan^2 x = 12$ for $0° \leq x \leq 360°$ **[4 marks]**

Answer _____

$\frac{}{8}$