Marked example 1

Paper 1 style · No calculator

1 5 marks SL 3.8 ●○○ Routine

This question is about solving equations for $0 \leq x \leq 2\pi$.

(a) Solve $2\cos x = \sqrt{3}$. **[3]**

(b) Solve $\tan x = -1$. **[2]**

MARKSCHEME (a)

$\cos x = \frac{\sqrt{3}}{2}$ (M1)

$x = \frac{\pi}{6}$ A1

$x = \frac{11\pi}{6}$ A1

Total 3 marks

Note $2\pi - \frac{\pi}{6}$.

MARKSCHEME (b)

$x = \frac{3\pi}{4}$ A1

$x = \frac{7\pi}{4}$ A1

Total 2 marks

Note Add the period π.

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