



QUESTION WORKBOOK

Trigonometric graphs and equations

Trigonometry · Year 12–13

7 questions · 20 marks

NAVY SCREEN EDITION

SECTION A · Warm-up

A1 Write down the exact values of $\sin 30^\circ$, $\cos 45^\circ$ and $\tan 60^\circ$. [2]

A2 Solve $\cos x = \frac{1}{2}$ for $0 \leq x < 360^\circ$, giving exact answers. [2]

SECTION B · Standard

B1 Solve $\sin x = -0.5$ for $0 \leq x < 360^\circ$. [3]

B2 Solve $2 \sin^2 x + \cos x - 1 = 0$ for $0 \leq x < 360^\circ$. [3]

B3 Solve $\sin x \cos x = 2 \sin x$ for $0 \leq x < 360^\circ$. [3]

B4 Solve $3 \sin x = 2 \cos x$ for $0 \leq x < 360^\circ$, to 1 decimal place. [3]

SECTION C · Stretch

C1 Solve $\cos(x - 40^\circ) = \frac{1}{2}$ for $0 \leq x < 360^\circ$. [4]