



1. Solve $5 \sin 2x = 2 \cos 2x$ for $0 \leq x < 360^\circ$, giving your answers to 1 decimal place.

(4)

Solutions

1.

Let $2x = y$ $5 \sin y = 2 \cos y$ $\tan y = \frac{\sin y}{\cos y}$	M1
$5 \tan y = 2$ $\tan y = \frac{2}{5}$ $y = 10.4$	M1
$2x = 21.8 + 180 = 201.8^\circ$ $2x = 21.8 + 260 = 190.9^\circ$ $2x = 21.8 + 540 = 280.9^\circ$	M1 M1

