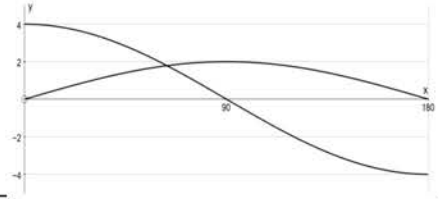
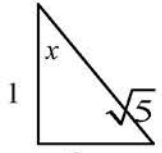
5	i		$y = 4\cos x$ $y = 2\sin x$ 	**B1** **B1** **[2]**	**1.2** **1.2**	Correct shapes and relative sizes Graphs labelled with correct amplitudes clear Ignore any graph beyond the given interval	
	ii		$4\cos x = 2\sin x$ $\tan x = 2$ $x = \arctan 2$  $4\cos x = 4 \times \frac{1}{\sqrt{5}} = \frac{4}{5}\sqrt{5}$ Point of intersection is $\left(\arctan 2, \frac{4}{5}\sqrt{5}\right)$	**M1** **A1** **M1** **A1** **[4]**	**3.1a** **1.1b** **1.1a** **1.1b**	Forming equation leading to tan$x$ = k oe Award for 63.4^0 for this first A mark Attempting to find exact value for cos$x$ or sin$x$ Must be a coordinate in this form	Do not allow for using 63.4^0
	iii		The student's argument is invalid as the period of tan$x$ is 180^0.	**E1** **[1]**	**2.3**	Must state or imply that the argument is invalid and give a correct reason	Allow for "roots occur every 180^0" oe