

7. (i) Solve, for $0 \leq x < \frac{\pi}{2}$, the equation

$$4 \sin x = \sec x \tag{4}$$

(ii) Solve, for $0 \leq \theta < 360^\circ$, the equation

$$5 \sin \theta - 5 \cos \theta = 2$$

giving your answers to one decimal place.

(Solutions based entirely on graphical or numerical methods are not acceptable.)

(5)