(a) Express $2 \cos x° - 3 \sin x°$ in the form $k \cos(x + a)°$ where $k > 0$ and $0 \le a < 360$.   **4**

(b) Hence solve $2 \cos x° - 3 \sin x° = 3$ for $0 \le x < 360$.   **3**

Answers:

(a) $\sqrt{13} \cos(x + 56 \cdot 3 \ldots)°$

(b) $x = 337.4$ or $x = 270$