QUESTION If $\sin\theta = -\dfrac{1}{2}$ find (i) $\cos\theta$, (ii) $\sec\theta$.

ANSWER

$\sin\theta = -\dfrac{1}{2}$,

(i) $\quad \cos^2\theta = 1 - \sin^2\theta = 1 - \left(-\dfrac{1}{2}\right)^2 = \dfrac{3}{4}, \quad \cos\theta = \pm\dfrac{\sqrt{3}}{2}$

(ii) $\quad \sec\theta = \dfrac{1}{\cos\theta} = \pm\dfrac{2}{\sqrt{3}}$