10 **(a)** Show that $(\tan x + \sec x)^2$ can be written as $\frac{1+\sin x}{1-\sin x}$. [4]

(b) Hence solve the equation $(\tan 3\theta + \sec 3\theta)^2 = 6$ for $0° \leqslant \theta \leqslant 180°$. [4]