5. Find the exact value of \( \cos(\alpha + \beta) \) if:
\[
\sin \alpha = \frac{5}{13}, \quad -\frac{3\pi}{2} < \alpha < -\pi \quad \text{and} \quad \tan \beta = -\sqrt{3}, \quad \frac{\pi}{2} < \beta < \pi
\]

6. Find all possible solutions (real numbers!) for each of the following:

a) \( 4\sin^2 x - 1 = 0 \)

b) \( \tan 3\theta - 1 = 0 \)