Pre Calculus 11: Solve for angles

1. When given an equation like $\sin\theta = -0.285$, how do I know which quadrant the angle is in? Explain:

2. Given the equation: $\cos\theta = k$ For what values of "k" will angle θ be in Quadrants 2 and 3? Explain:

3. Given the equation: $\tan\theta = k$ For what values of "k" will angle θ be in Quadrants 1 and 3? Explain:

4. When given an equation like $\sin\theta = k$, will there always be TWO answers between $0° \le \theta \le 360°$? Explain:

5. When given an equation like $\cos\theta = k$, will there always be TWO answers between $0° \le \theta \le 360°$? Explain:

6. When given an equation like $\tan\theta = k$, will there always be TWO answers between $0° \le \theta \le 360°$? Explain:

7. Solve for θ, where $0° \le \theta \le 360°$

a) $(\cos\theta - 1)(4\cos\theta - 3) = 0$

b) $6\sin^2\theta - 5\sin\theta + 2 = 0$

c) $4\cos^2\theta = 3$

d) $24\cos^2\theta - 26\cos\theta + 5 = 0$

e) $(\cos^2\theta + 1)(\cos\theta - 2)(\cos\theta + 3)(9\cos^2 + 1) = 0$