<u>**PRACTICE PROBLEMS FOR REVIEW OF CHAPTER 6**</u>   <u>**(solve on a separate paper)**</u>

Find all solutions to each equation for $0° < \theta < 360°$.

1. $2\cos \theta - 1 = 0$ 2. $\sin(2\theta - 45°) = -1$

Find all solutions to each equation for $0 < \theta < 2\pi$.

3. $\cos^2 x + \cos x = 0$ 4. $2\sin^2 x + 3\sin x - 2 = 0$

Find all solutions to each equation for $0° < \theta < 360°$.
Give exact answer, if possible; otherwise, answer to the nearest tenth.

5. $5\cos \theta - 2 = 0$ 6. $7\sin \theta + 6 = 0$

7. $4\sin \theta - \csc \theta = 0$ 8. $\sin 2\theta + 2\cos \theta = 0$ 9. $\cos 2\theta = \frac{\sqrt{3}}{2}$

Find all solutions to each equation for $0 < \theta < 2\pi$.
Give exact answer, if possible; otherwise, answer to the nearest tenth.

10. $2\cos^2 + \sin x - 1 = 0$ 11. $\cos 2x + 2\cos x - 3 = 0$ 12. $\sin x - \cos x = -1$

Ch. 6 Answers

1. 60°, 300°	2. 157.5°, 337.5°	3. π/2, π, 3π/2	4. π/6, 5π/6
5. 66.4°, 293.5°	6. 239°, 301°	7. 30°, 150°, 210°, 330°	
8. 90°, 270°	9. 15°, 165°, 195°, 345°	10. π/2, 7π/6, 11π/6	
11. 0	12. 0, 3π/2		