Chapter 14 Review B Name _____ Assignment # _____

You must do your work on a separate piece of paper for full credit.

1 – 3: Solve for $0 \le x < 2\pi$

1. $\sin 3x = -\frac{1}{2}$	2. $\tan^2 2x - 1 = 0$	3. $2\sin 2x = \sqrt{3}$
#4 – 6 Find the general solution.		
4. $\tan 2x \cot x - 3 = 0$	5. $\cos 2x + \cos x = 0$	6. $\sin 4x \cos x = \sin x \cos 4x$
#7 – 9 Find the exact values		
7. $\sec \frac{7\pi}{12}$	8. $\csc 195^\circ$	$\cos 75^\circ \cos 15^\circ + \sin 75^\circ \sin 15^\circ$
#10 – 12 : Find the exact values of each expression if $\cos\alpha = \frac{3}{5}; \frac{3\pi}{2} < \alpha < 2\pi$		
10. $\tan 2\alpha$	$\tan \frac{\alpha}{2}$	$\cos \frac{\alpha}{2}$
Simplify		
13. $\frac{\cos^2 x}{1 - \sin x}$	14. $\cos(90^\circ - A)(\csc A - \sin A)$	15. $\frac{\cot^2\theta - \csc^2\theta}{\cos^2\theta}$

Answers:

1. $\frac{7\pi}{18}; \frac{11\pi}{18}; \frac{19\pi}{18}; \frac{23\pi}{18}; \frac{31\pi}{18}; \frac{35\pi}{18}$

2. $\frac{\pi}{8}; \frac{3\pi}{8}; \frac{5\pi}{8}; \frac{7\pi}{8}; \frac{9\pi}{8}; \frac{11\pi}{8}; \frac{13\pi}{8}; \frac{15\pi}{8}$

3. $\frac{\pi}{6}; \frac{\pi}{3}; \frac{7\pi}{6}; \frac{4\pi}{3}$

4. $\frac{\pi}{6} + n\pi; \frac{5\pi}{6} + n\pi$

5. $\frac{\pi}{3} + \frac{2n\pi}{3}$

6. $\frac{n\pi}{3}$

7. $-\sqrt{2} - \sqrt{6}$

8. $-\sqrt{2} - \sqrt{6}$

9. ½

10. 24/7

11. – ½

12. $\frac{-2\sqrt{5}}{5}$

13. 1 + sin x

14. $\cos^2 A$

15. $-\sec^2\theta$