I. Find two coterminal angles, one positive and one negative for each of the following.

1. 225o 2. 750o 3. -60o

4. -π 5. π/4 6. 5π/6

II. Evaluate the following trigonometric expressions.

7. sin(225o) 8. csc(750o) 9. cot(-60o)

10. tan(π/2) 11. cos(7π/4) 12. sec(-π/6)

III. Solve the following trigonometric equations. List answers in both degrees and radians. .

13. tan(θ) = 1 14. sin(θ) =  15. cos(θ) = 

16. cot(θ) =  17. sec(θ) =  18. csc(θ) = -2

IV. Using a calculator, solve for the angle, θ, where. Round answers to the nearest hundredth.

19. sin θ = 0.3907 20. cos θ = -0.3746 21. tan θ = 0.3640

22. sec θ = 1.0154 23. csc θ = 4.1336 24. cot θ = -0.1405

V. Solve for all six trig functions of ϴ with the given characteristics.

 19. An endpoint on the terminal side is (-6, -8). 20. ϴ is in Quadrant II and .

VI. Free Response Questions.

 21. Define a reference angle.

 22. Identify the angles on the unit circle with the same reference angles.

 23. Identify which trig functions are positive in each quadrant.

 24. Identify the restrictions placed on the domain of all 6 inverse trigonometric functions.

VII. Simplify the following inverse trig expressions.

 25.  26.  27. 

 28.  29.  30. 

 31. 