T-4 Worksheet   Name_____

θ	$sin\theta$	$cos\theta$	$tan\theta$	$cot\theta$	$sec\theta$	$csc\theta$
0°						
90°						
180°						
270°						

SHOW ALL WORK

Given θ in standard position with terminal side of θ passing through the given point, find the required function.

1. (-9,-12) cos θ 2. (2,-2) tan θ 3. (-3,0) cos θ 4. (-5,3) tan θ

Given θ in standard position terminating in the given quadrant, find cot θ, $sec\theta$, and csc θ.

5. $\sin \theta = -\frac{2}{5}$, III   6. $\tan \theta = \frac{5}{4}$, I   7. $\sin \theta = -\frac{1}{2}$, IV

8. $\cos \theta = \frac{2}{3}$, IV   9. $\cos \theta = -\frac{5}{8}$, II

Evaluate. Exact values only, show all work.

10. $tan60° - cos30°tan45°$ 11. $sin0° + cos180° - sin270°$ 12. $cos0°cos180° - sin0°sin180°$

Find the exact values for each of the following (no decimal answers).

13. $cos\ 225°$ 14. $\sin(-60°)$ 15. $\sin(-315°)$ 16. $\sin 540°$ 17. $tan315°$ 18. $sec\ 90°$

Express as a function of a ***POSITIVE ACUTE*** angle.

19. $cos160°$ 20. $tan200°$ 21. $cot440°$