Algebra 2 Honors HW #_____ Name_____
13.4 Inverse Functions
(#13.3 Review) Date_____

Find the exact values. **Give answers in degrees and radians.**

1. $\tan^{-1}\sqrt{3}$ 2. $\sec^{-1}2$ 3. $\csc^{-1}\left(-\sqrt{2}\right)$ 4. $\cot^{-1}(-1)$

Find exact values. No calculators. On #9-11. Give ∠ measures in radians. Draw Δs & show work.

5. $\sin^{-1}(\cos 150°)$ 6. $\tan^{-1}\left(\cot\frac{3\pi}{4}\right)$ 7. $\cot^{-1}(\tan(-30°))$

8. $\cos\left(\sin^{-1}\left(\frac{-1}{2}\right)\right)$ 9. $\cot\left(\sin^{-1}\left(\frac{8}{17}\right)\right)$ 10 $\cos(\cot^{-1}2)$

11. $\cos(\csc^{-1}(-4))$

Find the value of θ, to the nearest tenth of a degree.

12. $\sin\theta = .6118$, if $90° < \theta < 270°$

13. $\cos\theta = -.4275$, if $180° < \theta < 360°$

14. $\tan\theta = -1.582$, if $180° < \theta < 360°$

15. The terminal side of angle θ in standard position passes through (-1, 4). Find the exact values of the six trigonometric functions of θ.

Find exact values. No decimals. Show work and triangles.

16. $\tan(-240°)$

17. $\sec 690°$

18. $\cos\frac{5\pi}{4}$

19. $\cot\left(\frac{-\pi}{3}\right)$

20. Find the values of all 6 trigonometric functions of 180°. (calculator OK)