

**8.6 Composition of Trig Values**

Name: \_\_\_\_\_

Find the exact values of each expression using radicals or radians if necessary.

1.  $\tan\left(\cos^{-1}\left(\frac{4}{5}\right)\right)$

2.  $\cos\left(\arctan\left(\frac{4}{3}\right)\right)$

3.  $\sin\left(\tan^{-1}\left(-\frac{5}{12}\right)\right)$

4.  $\sec\left(\arcsin\left(-\frac{4}{7}\right)\right)$

5.  $\sin^{-1}(\cos(0))$

6.  $\arccos\left(\sin\left(\frac{\pi}{6}\right)\right)$

7.  $\cos^{-1}\left(\sin\left(\frac{4\pi}{3}\right)\right)$

8.  $\cot\left(\csc^{-1}\left(-\frac{5}{3}\right)\right)$

9.  $\sin^{-1}\left(\cos\left(\frac{7\pi}{6}\right)\right)$

$$10. \tan^{-1}(\cos(\pi))$$

$$11. \tan^{-1}\left(\tan\left(-\frac{4\pi}{3}\right)\right)$$

$$12. \cos\left(\arcsin\left(-\frac{\sqrt{3}}{5}\right)\right)$$

$$13. \sin\left(\sec^{-1}\left(-\frac{4}{3}\right)\right)$$

$$14. \operatorname{arcsec}\left(\sec\left(-\frac{\pi}{3}\right)\right)$$

$$15. \sin^{-1}\left(\cot\left(\frac{3\pi}{4}\right)\right)$$

$$16. \tan\left(\operatorname{arcsec}\left(-\sqrt{2}\right)\right)$$

$$17. \sin\left(\sec^{-1}(-4)\right)$$

$$18. \sec\left(\csc^{-1}(-3)\right)$$

$$19. \csc\left(\cot^{-1}(2)\right)$$

$$20. \arcsin(\cos(\pi))$$

$$21. \tan\left(\sin^{-1}\left(-\frac{7}{5}\right)\right)$$