4.2A HW Answers

Tuesday, October 10, 2017 3:10 PM

5. $\sin\frac{\pi}{6} = \frac{1}{2}$

6. $\sin\frac{\pi}{3} = \frac{\sqrt{3}}{2}$

7. $\cos\frac{5\pi}{6} = -\frac{\sqrt{3}}{2}$

8. $\cos\frac{2\pi}{3} = -\frac{1}{2}$

9. $\tan\pi = \frac{0}{-1} = 0$

10. $\tan 0 = \frac{0}{1} = 0$

11. $\csc\frac{7\pi}{6} = \frac{1}{-\frac{1}{2}} = -2$

12. $\csc\frac{4\pi}{3} = \frac{1}{-\frac{\sqrt{3}}{2}} = \frac{-2\sqrt{3}}{3}$

13. $\sec\frac{11\pi}{6} = \frac{1}{\frac{\sqrt{3}}{2}} = \frac{2\sqrt{3}}{3}$

14. $\sec\frac{5\pi}{3} = \frac{1}{\frac{1}{2}} = 2$

15. $\sin\frac{3\pi}{2} = -1$

16. $\cos\frac{3\pi}{2} = 0$

17. $\sec\frac{3\pi}{2} =$ undefined

18. $\tan\frac{3\pi}{2} =$ undefined

19. a. $\cos\frac{\pi}{6} = \frac{\sqrt{3}}{2}$

b. $\cos\left(-\frac{\pi}{6}\right) = \cos\frac{\pi}{6} = \frac{\sqrt{3}}{2}$

20. a. $\cos\frac{\pi}{3} = \frac{1}{2}$

21. a. $\sin\frac{5\pi}{6} = \frac{1}{2}$

b. $\sin\left(-\frac{5\pi}{6}\right) = -\sin\frac{5\pi}{6} = -\frac{1}{2}$

22. a. $\sin\frac{2\pi}{3} = \frac{\sqrt{3}}{2}$

b. $\sin\left(-\frac{2\pi}{3}\right) = -\sin\frac{2\pi}{3} = -\frac{\sqrt{3}}{2}$

23. a. $\tan\frac{5\pi}{3} = \frac{-\frac{\sqrt{3}}{2}}{\frac{1}{2}} = -\sqrt{3}$

b. $\tan\left(\frac{5\pi}{\quad}\right) \quad \tan\frac{5\pi}{\quad}$ $\sqrt{2}$

20. **a.** $\cos\frac{\pi}{3} = \frac{1}{2}$

b. $\cos\left(-\frac{\pi}{3}\right) = \cos\frac{\pi}{3} = \frac{1}{2}$

b. $\tan\left(-\frac{5\pi}{3}\right) = -\tan\frac{5\pi}{3} = \sqrt{3}$

24. **a.** $\tan\frac{11\pi}{6} = \frac{-\frac{1}{2}}{\frac{\sqrt{3}}{2}} = -\frac{\sqrt{3}}{3}$

b. $\tan\left(-\frac{11\pi}{6}\right) = -\tan\frac{11\pi}{6} = \frac{\sqrt{3}}{3}$