

Math 3 Unit 8 Worksheet 6
Radians and Trigonometric Functions
**** Scientific calculator not allowed ****

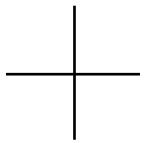
Name: _____
 Date: _____ Per: _____

[1-12]: Convert each angle from degrees to radian measure or radians to degrees, whichever is appropriate.

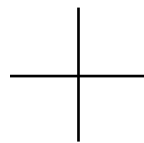
1. $\theta = 135^\circ$ 2. $\theta = 240^\circ$ 3. $\theta = \frac{7\pi}{5}$ 4. $\theta = \frac{11\pi}{12}$ 5. $\theta = 330^\circ$ 6. $\theta = 270^\circ$
7. $\theta = \frac{15\pi}{8}$ 8. $\theta = \frac{5\pi}{4}$ 9. $\theta = -150^\circ$ 10. $\theta = -315^\circ$ 11. $\theta = -3\pi$ 12. $\theta = -\frac{5\pi}{3}$

[13-24]: A) Sketch the reference angle for each in the correct quadrant. B) Find $\sin \theta$, $\cos \theta$, & $\tan \theta$.

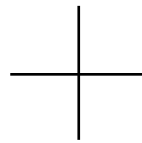
13. $\theta = \frac{5\pi}{4}$ 14. $\theta = \frac{\pi}{3}$ 15. $\theta = \frac{5\pi}{6}$ 16. $\theta = \frac{\pi}{4}$



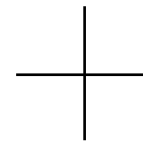
b) $\sin \theta =$ ____
 $\cos \theta =$ ____
 $\tan \theta =$ ____



b) $\sin \theta =$ ____
 $\cos \theta =$ ____
 $\tan \theta =$ ____

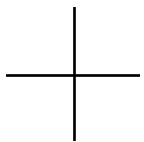


b) $\sin \theta =$ ____
 $\cos \theta =$ ____
 $\tan \theta =$ ____

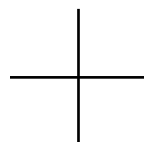


b) $\sin \theta =$ ____
 $\cos \theta =$ ____
 $\tan \theta =$ ____

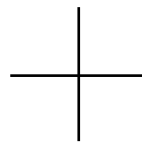
17. $\theta = \frac{5\pi}{3}$ 18. $\theta = \frac{13\pi}{6}$ 19. $\theta = -\frac{\pi}{6}$ 20. $\theta = -\frac{2\pi}{3}$



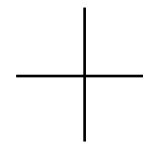
b) $\sin \theta =$ ____
 $\cos \theta =$ ____
 $\tan \theta =$ ____



b) $\sin \theta =$ ____
 $\cos \theta =$ ____
 $\tan \theta =$ ____

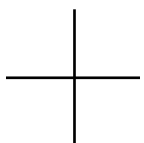


b) $\sin \theta =$ ____
 $\cos \theta =$ ____
 $\tan \theta =$ ____

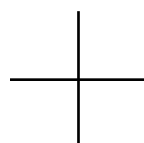


b) $\sin \theta =$ ____
 $\cos \theta =$ ____
 $\tan \theta =$ ____

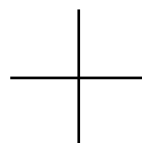
21. $\theta = -\frac{5\pi}{4}$ 22. $\theta = \frac{2\pi}{3}$ 23. $\theta = \frac{7\pi}{4}$ 24. $\theta = \frac{11\pi}{6}$



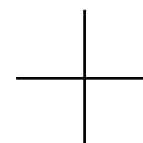
b) $\sin \theta =$ ____
 $\cos \theta =$ ____
 $\tan \theta =$ ____



b) $\sin \theta =$ ____
 $\cos \theta =$ ____
 $\tan \theta =$ ____



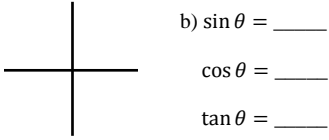
b) $\sin \theta =$ ____
 $\cos \theta =$ ____
 $\tan \theta =$ ____



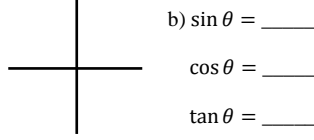
b) $\sin \theta =$ ____
 $\cos \theta =$ ____
 $\tan \theta =$ ____

[25-30]: A) Sketch each angle. B) Find $\sin \theta$, $\cos \theta$, & $\tan \theta$.

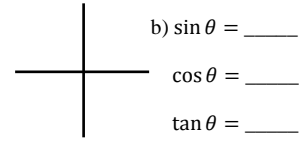
25. $\theta = \frac{3\pi}{2}$



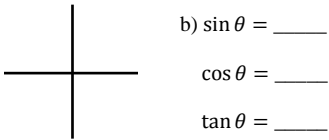
26. $\theta = 3\pi$



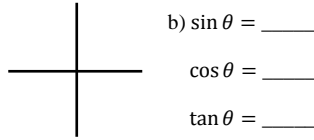
27. $\theta = \frac{5\pi}{2}$



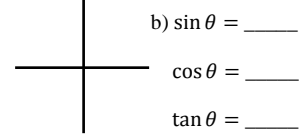
28. $\theta = 4\pi$



29. $\theta = -\frac{5\pi}{2}$

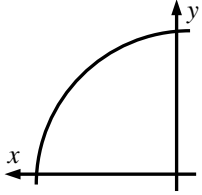


30. $\theta = -7\pi$

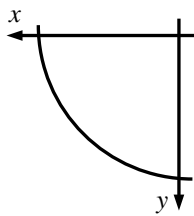


[31-34]: Find the ordered pair on the unit circle for each angle.

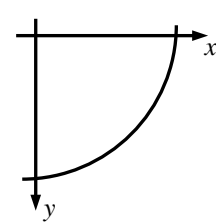
31. $\theta = \frac{3\pi}{4}$



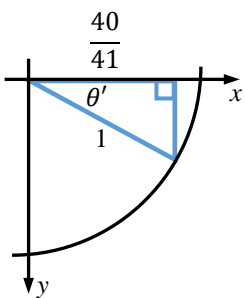
32. $\theta = \frac{7\pi}{6}$



33. $\theta = \frac{5\pi}{3}$



34.



35.

If $\tan A = \frac{5}{2}$, then find the perimeter and area for $\triangle ABC$.

