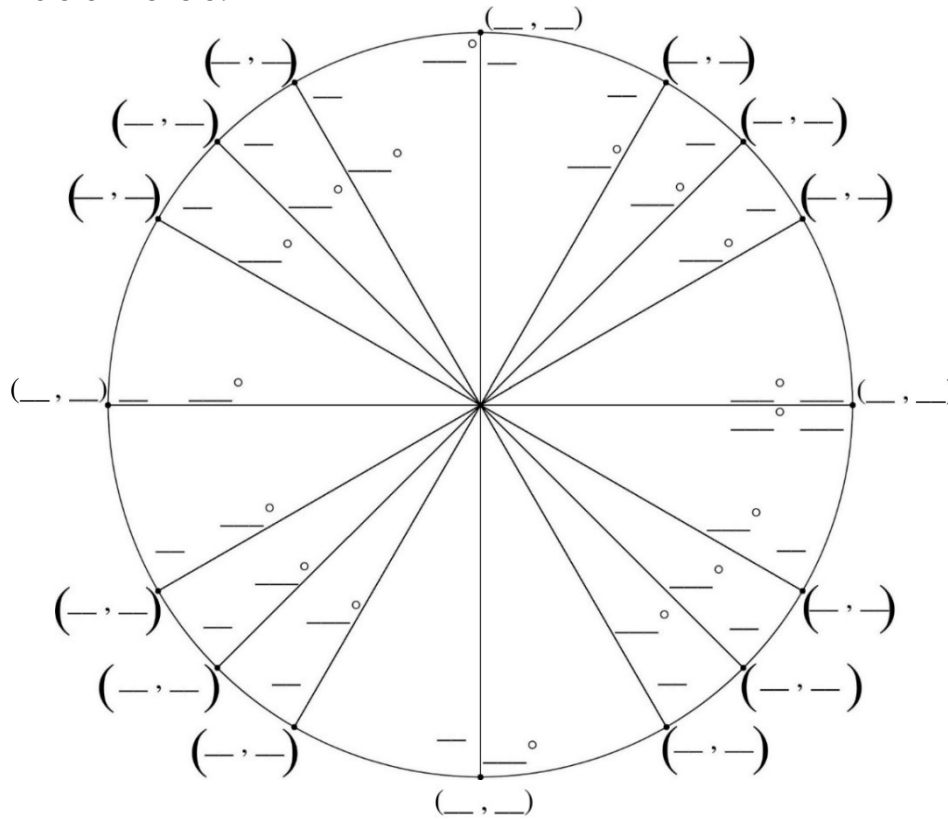
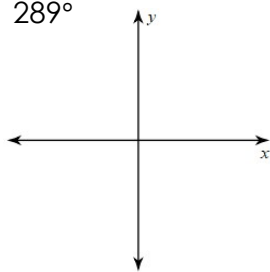


1. Fill in the whole unit circle.

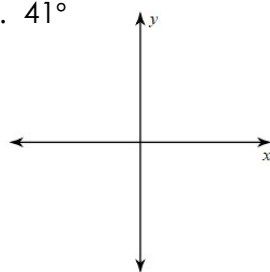


Sketch the angle in the correct quadrant.

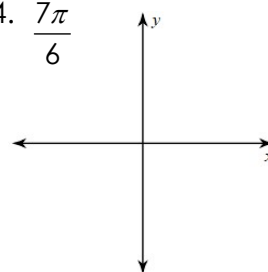
2. 289°



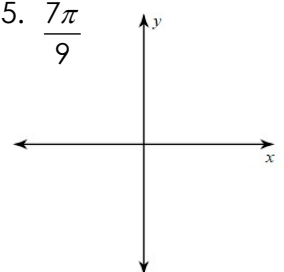
3. 41°



4. $\frac{7\pi}{6}$

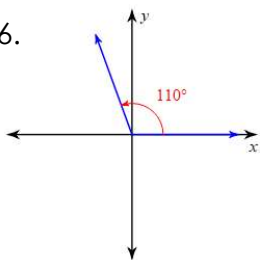


5. $\frac{7\pi}{9}$

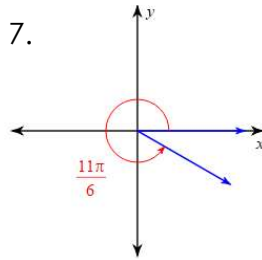


State the reference angles.

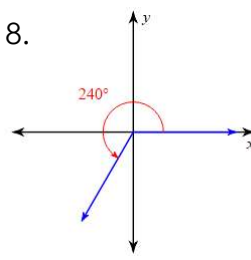
6.



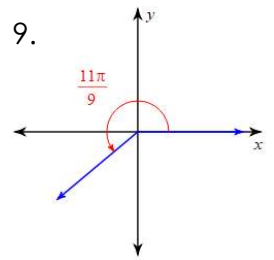
7.



8.



9.



10. Determine the quadrant in which 172° terminates.

11. Determine the quadrant in which $\frac{2\pi}{7}$.

Convert each degree measure into radians.

12. 75°

13. 320°

14. 10°

15. 85°

Convert each radian measure into degrees.

16. $\frac{\pi}{9}$

17. $\frac{5\pi}{6}$

18. $\frac{55\pi}{36}$

19. $\frac{7\pi}{12}$

Find the exact value of each trigonometric function.

20. $\cos 315^\circ =$

21. $\sin 60^\circ =$

22. $\tan \frac{\pi}{2} =$

23. $\cos \pi =$

24. $\tan \frac{5\pi}{4} =$

25. $\sin 330^\circ =$

26. $\cos \frac{3\pi}{4} =$

27. $\tan \frac{2\pi}{3} =$

28. $\cos 0^\circ =$

29. $\sin \frac{7\pi}{6} =$

30. $\cos \frac{7\pi}{6} =$

31. $\tan \frac{7\pi}{6} =$

32. $\sin 90^\circ =$

33. $\cos 240^\circ =$

