

Convert to radians or degrees.

1. $\frac{3\pi}{2}$ 2. 300° 3. $\frac{11\pi}{6}$ 4. 135° 5. $-\frac{4\pi}{3}$ 6. 120° 7. $\frac{19\pi}{10}$
 8. 27° 9. $\frac{17\pi}{12}$ 10. -132° 11. $-\frac{4\pi}{9}$ 12. 500° 13. $\frac{20\pi}{3}$ 14. -990°

Sketch each angle. Then, label and find the measure of the reference angle.

15. $\frac{4\pi}{3}$ 16. $\frac{6\pi}{5}$ 17. $\frac{13\pi}{8}$ 18. $-\frac{\pi}{6}$ 19. $\frac{9\pi}{10}$ 20. 20π 21. $-\frac{15\pi}{8}$

Identify each angle θ in the domain $0 \leq \theta \leq 2\pi$ that is coterminal with the given angle.

22. 15π 23. $\frac{29\pi}{6}$ 24. $-\frac{25\pi}{4}$ 25. $\frac{40\pi}{9}$ 26. $-\frac{8\pi}{3}$ 27. $\frac{57\pi}{10}$ 28. $-\frac{27\pi}{25}$

Sketch each reference angle in the given quadrant. Then, find the measure of an angle θ in the domain $0 \leq \theta \leq 2\pi$ with the given reference angle.

29. $\frac{\pi}{6}$ in quadrant III 30. $\frac{\pi}{4}$ in quadrant II 31. $\frac{\pi}{3}$ in quadrant IV

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