

2. $330^\circ = 330^\circ \cdot \frac{\pi}{180} \text{ rad} = \frac{11\pi}{6} \text{ rad} \approx 5.759 \text{ rad}$
4. $-30^\circ = -30^\circ \cdot \frac{\pi}{180} \text{ rad} = \frac{-\pi}{6} \text{ rad} \approx -0.524 \text{ rad}$
6. $-80^\circ = -80^\circ \cdot \frac{\pi}{180} \text{ rad} = \frac{-4\pi}{9} \text{ rad} \approx -1.396 \text{ rad}$
8. $-150^\circ = -150^\circ \cdot \frac{\pi}{180} \text{ rad} = \frac{-5\pi}{6} \text{ rad} \approx -2.618 \text{ rad}$
10. $\frac{3\pi}{4} = \frac{3\pi}{4} \cdot \frac{180^\circ}{\pi} = 135^\circ$
12. $\frac{5\pi}{6} = \frac{5\pi}{6} \cdot \frac{180^\circ}{\pi} = 150^\circ$
14. $1.5 = 1.5 \cdot \frac{180^\circ}{\pi} = \frac{270^\circ}{\pi} \approx 85.9^\circ$
16. $-\frac{\pi}{12} = -\frac{\pi}{12} \cdot \frac{180^\circ}{\pi} = -15^\circ$
18. $\frac{\pi}{18} \times \frac{180^\circ}{\pi \text{ rad}} = 10^\circ$
20. 135° is coterminal with: $135^\circ + 360^\circ = 495^\circ$, $135^\circ + 720^\circ = 855^\circ$, $135^\circ - 360^\circ = -225^\circ$, $135^\circ - 720^\circ = -585^\circ$.
22. $\frac{11\pi}{6}$ is coterminal with: $\frac{11\pi}{6} + 2\pi = \frac{23\pi}{6}$, $\frac{11\pi}{6} + 4\pi = \frac{35\pi}{6}$, $\frac{11\pi}{6} - 2\pi = -\frac{\pi}{6}$, $\frac{11\pi}{6} - 4\pi = -\frac{13\pi}{6}$.
24. -50° is coterminal with: $-50^\circ + 360^\circ = 310^\circ$, $-50^\circ + 720^\circ = 670^\circ$, $-50^\circ - 360^\circ = -410^\circ$, $-50^\circ - 720^\circ = -770^\circ$.
26. Since $330^\circ - (-30^\circ) = 360^\circ$, the angles are coterminal.
28. Since $\frac{32\pi}{3} - \frac{11\pi}{3} = \frac{21\pi}{3} = 7\pi$ is not a multiple of 2π , the angles are not coterminal.
30. Since $340^\circ - 50^\circ = 290^\circ$ is not a multiple of 360° , the angles are not coterminal.
32. Since $361^\circ - 1^\circ = 360^\circ$, the angles 361° and 1° are coterminal.
34. Since $-100^\circ - 260^\circ = -360^\circ$ is a multiple of 360° , the angles -100° and 260° are coterminal.
36. Since $1270^\circ - 190^\circ = 1080^\circ = 3 \cdot 360^\circ$ is a multiple of 360° , the angles 1270° and 190° are coterminal.
38. Since $-\frac{7\pi}{3} - \frac{5\pi}{3} = 4\pi$ is a multiple of 2π , the angles $-\frac{7\pi}{3}$ and $\frac{5\pi}{3}$ are coterminal.
40. Since $10 - 2\pi \approx 3.717$, the angles 10 and $10 - 2\pi$ are coterminal.
42. Since $\frac{51\pi}{2} - \frac{3\pi}{2} = 24\pi = 12 \cdot 2\pi$, the angles $\frac{51\pi}{2}$ and $\frac{3\pi}{2}$ are coterminal.
44. $\theta = \frac{s}{r} = \frac{10}{5} = 2 \text{ rad} = 2 \cdot \frac{180^\circ}{\pi} \approx 114.6^\circ$
46. Using the formula $s = \theta r$, the length of the arc is $s = 45^\circ \cdot \frac{\pi}{180^\circ} \cdot 10 = \frac{5\pi}{2} \approx 7.85 \text{ m}$
48. Solving for θ we have $\theta = \frac{s}{r}$, the measure of the central angle is $\theta = \frac{6}{5} = 1.2$
 $\text{rad} = 1.2 \cdot \frac{180^\circ}{\pi} \approx 68.8^\circ$.