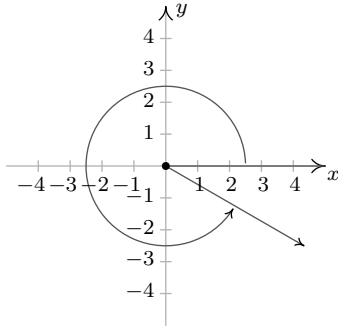
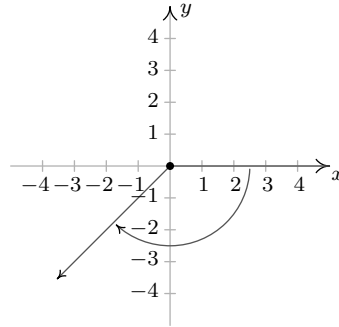


Worksheet 13 KEY - Angles (§6.1)

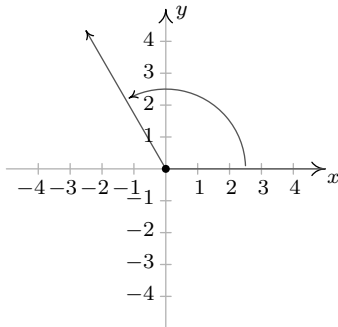
1. 330° is a Quadrant IV angle
coterminal with 690° and -30°



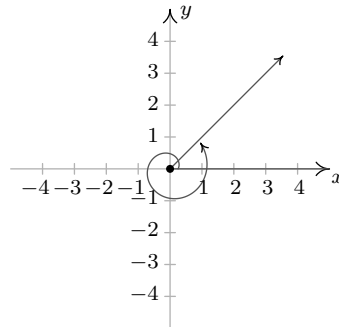
2. -135° is a Quadrant III angle
coterminal with 225° and -495°



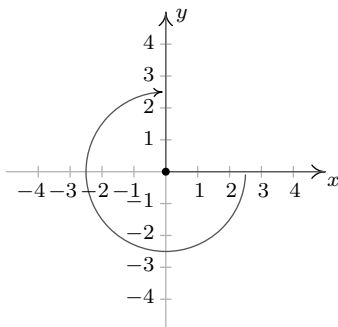
3. 120° is a Quadrant II angle
coterminal with 480° and -240°



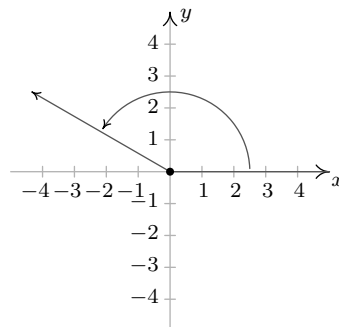
4. 405° is a Quadrant I angle
coterminal with 45° and -315°



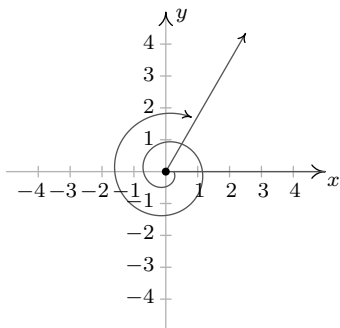
5. -270° lies on the positive y -axis
coterminal with 90° and -630°



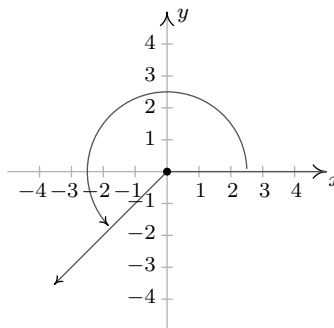
6. $\frac{5\pi}{6}$ is a Quadrant II angle
coterminal with $\frac{17\pi}{6}$ and $-\frac{7\pi}{6}$



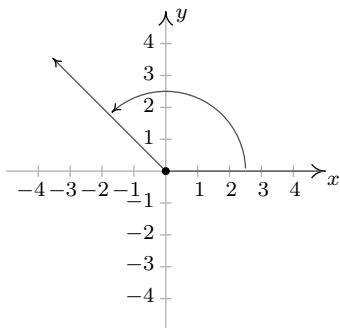
7. $-\frac{11\pi}{3}$ is a Quadrant I angle
coterminal with $\frac{\pi}{3}$ and $-\frac{5\pi}{3}$



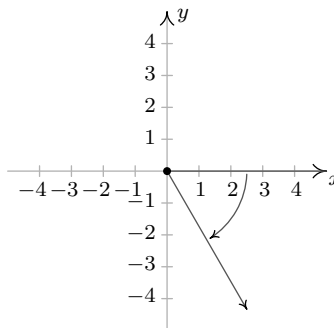
8. $\frac{5\pi}{4}$ is a Quadrant III angle
coterminal with $\frac{13\pi}{4}$ and $-\frac{3\pi}{4}$



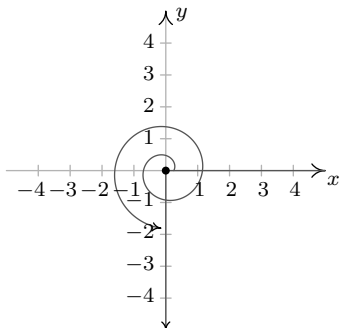
9. $\frac{3\pi}{4}$ is a Quadrant II angle
coterminal with $\frac{11\pi}{4}$ and $-\frac{5\pi}{4}$



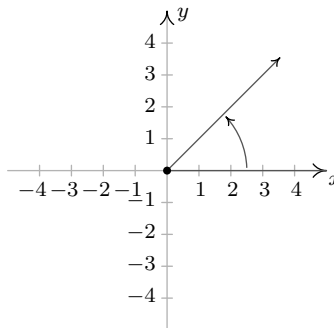
10. $-\frac{\pi}{3}$ is a Quadrant IV angle
coterminal with $\frac{5\pi}{3}$ and $-\frac{7\pi}{3}$



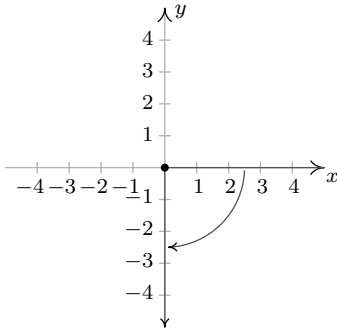
11. $\frac{7\pi}{2}$ lies on the negative y-axis
coterminal with $\frac{3\pi}{2}$ and $-\frac{\pi}{2}$



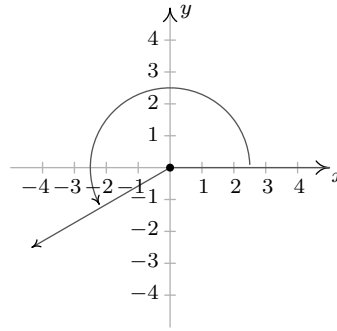
12. $\frac{\pi}{4}$ is a Quadrant I angle
coterminal with $\frac{9\pi}{4}$ and $-\frac{7\pi}{4}$



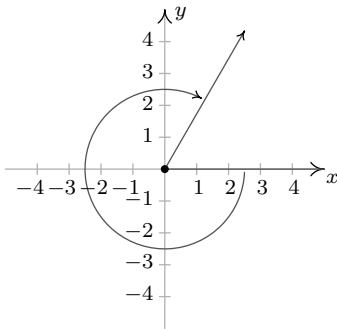
13. $-\frac{\pi}{2}$ lies on the negative y -axis
coterminal with $\frac{3\pi}{2}$ and $-\frac{5\pi}{2}$



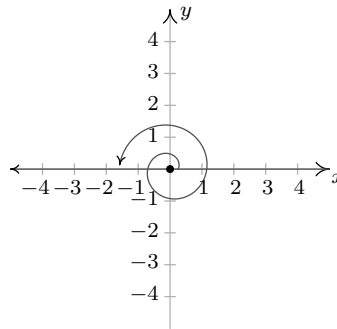
14. $\frac{7\pi}{6}$ is a Quadrant III angle
coterminal with $\frac{19\pi}{6}$ and $-\frac{5\pi}{6}$



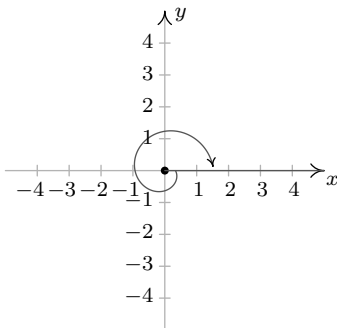
15. $-\frac{5\pi}{3}$ is a Quadrant I angle
coterminal with $\frac{\pi}{3}$ and $-\frac{11\pi}{3}$



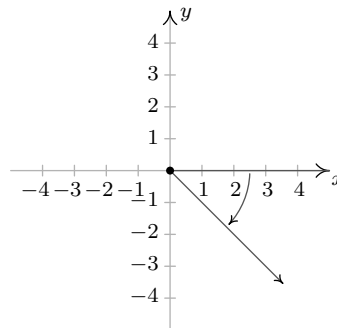
16. 3π lies on the negative x -axis
coterminal with π and $-\pi$



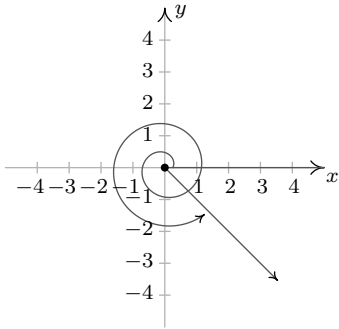
17. -2π lies on the positive x -axis
coterminal with 2π and -4π



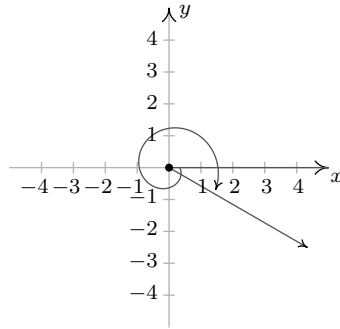
18. $-\frac{\pi}{4}$ is a Quadrant IV angle
coterminal with $\frac{7\pi}{4}$ and $-\frac{9\pi}{4}$



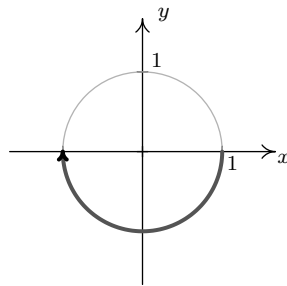
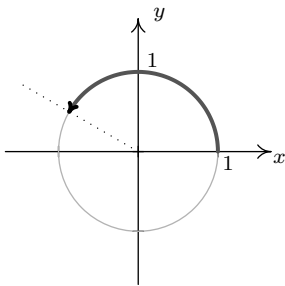
19. $\frac{15\pi}{4}$ is a Quadrant IV angle
coterminal with $\frac{7\pi}{4}$ and $-\frac{\pi}{4}$



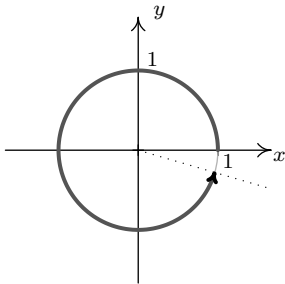
20. $-\frac{13\pi}{6}$ is a Quadrant IV angle
coterminal with $\frac{11\pi}{6}$ and $-\frac{\pi}{6}$



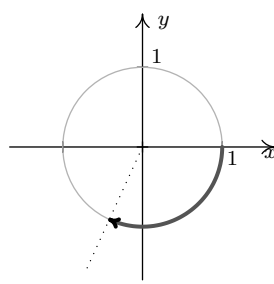
- | | | | |
|-------------------------------|----------------------|----------------------|-----------------------|
| 21. 0 | 22. $\frac{4\pi}{3}$ | 23. $\frac{3\pi}{4}$ | 24. $-\frac{3\pi}{2}$ |
| 25. $-\frac{7\pi}{4}$ | 26. $\frac{5\pi}{6}$ | 27. $\frac{\pi}{4}$ | 28. $-\frac{5\pi}{4}$ |
| 29. 180° | 30. -120° | 31. 210° | 32. 330° |
| 33. 60° | 34. 300° | 35. -30° | 36. 90° |
| 37. $\theta = \frac{5\pi}{6}$ | | 38. $\theta = -\pi$ | |



39. $\theta = 6$



40. $\theta = -2$



41. $\theta = 12$ (between 1 and 2 revolutions)

