

Name _____

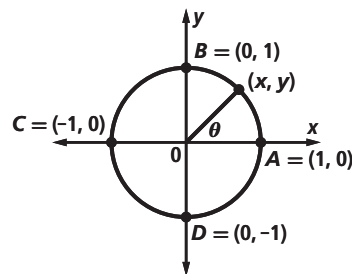
10-4B Lesson Master

Questions on SPUR Objectives

See Student Edition pages 724–727 for objectives.

PROPERTIES Objective E

In 1 and 2, use the diagram at the right.



1. Explain why $x = \cos \theta$ and $y = \sin \theta$.

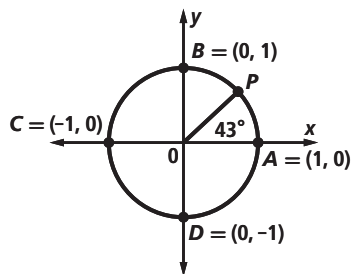
2. Give two rotations that map point A to point D .

In 3 and 4, use the diagram at the right.

3. Find the coordinates of P to the nearest thousandth.

$P =$ _____

4. Give a rotation that maps point P to point B .

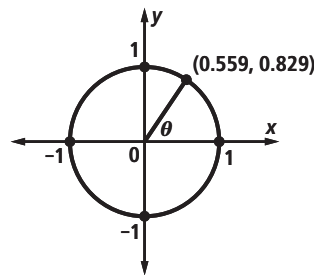


In 5–7, use the diagram at the right.

5. Find $\cos \theta$.

6. Find $\sin \theta$.

7. Find θ to the nearest degree.



8. Explain why $\cos 13^\circ = \cos 373^\circ$.

9. Explain why $\sin 89^\circ = \sin 449^\circ$.

10. **True or False** $\sin (-120^\circ) = \sin (600^\circ)$. Explain.

11. **True or False** $\cos 45^\circ = \cos (-315^\circ)$. Explain.

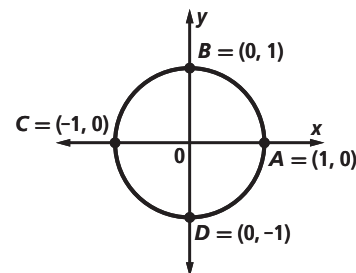
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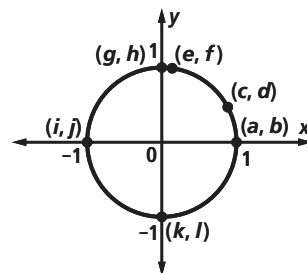
REPRESENTATIONS Objective I

In 12-19, refer to the diagram at the right. a. Determine which point is the image of (1, 0) under the given rotation.
b. Find the value of the trigonometric function.



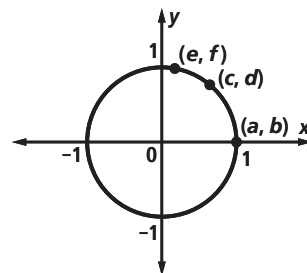
- 12. a. $R_{360}(1, 0) =$ _____ b. $\cos 360^\circ =$ _____
- 13. a. $R_{270}(1, 0) =$ _____ b. $\cos 270^\circ =$ _____
- 14. a. $R_{450}(1, 0) =$ _____ b. $\sin 450^\circ =$ _____
- 15. a. $R_{-180}(1, 0) =$ _____ b. $\cos (-80^\circ) =$ _____
- 16. a. $R_{540}(1, 0) =$ _____ b. $\cos 540^\circ =$ _____
- 17. a. $R_{-270}(1, 0) =$ _____ b. $\sin (-270^\circ) =$ _____
- 18. a. $R_{-450}(1, 0) =$ _____ b. $\cos (-450^\circ) =$ _____
- 19. a. $R_{3600}(1, 0) =$ _____ b. $\sin 3600^\circ =$ _____

In 20-27, which letter on the figure at the right could be the value of the trigonometric function?



- 20. $\cos 180^\circ$ _____ 21. $\sin (270^\circ)$ _____
- 22. $\sin 28^\circ$ _____ 23. $\cos 82^\circ$ _____
- 24. $\sin (-270^\circ)$ _____ 25. $\cos 388^\circ$ _____
- 26. $\cos 450^\circ$ _____ 27. $\sin (-278^\circ)$ _____

In 28-35, which letter on the figure at the right could be the value of the trigonometric function?



- 28. $\sin (-310^\circ)$ _____ 29. $\cos 0^\circ$ _____
- 30. $\cos 80^\circ$ _____ 31. $\cos 50^\circ$ _____
- 32. $\sin 440^\circ$ _____ 33. $\sin 1080^\circ$ _____
- 34. $\cos (-670^\circ)$ _____ 35. $\sin 0^\circ$ _____