

Section 4.4: Trig Functions of Any Angle

Exercises

For the following angles in standard position, sketch the angle (including the swirly line to show direction of rotation).

1. 150°
2. 335°
3. 420°
4. -135°
5. -530°
6. 540°

For the following angles, list one positive and one negative coterminal angle. Answers may vary.

7. 25°
8. 210°
9. -300°
10. 1080°
11. -165°
12. -12°

Give the reference angle for the following angles.

13. 120°
14. -150°
15. 300°
16. -330°
17. 415°
18. 750°

State the signs (positive or negative) of the three basic trig functions of θ if θ is in

19. QI

20. QIV

21. QIII

22. QII

Calculate the following to four decimal places.

23. $\sin -63.2^\circ$

24. $\cos 154^\circ$

25. $\tan 90^\circ$

26. $\tan 1025^\circ$

27. $\cos 180^\circ$

28. $\sin -52\ 515.82^\circ$