

# 9.1

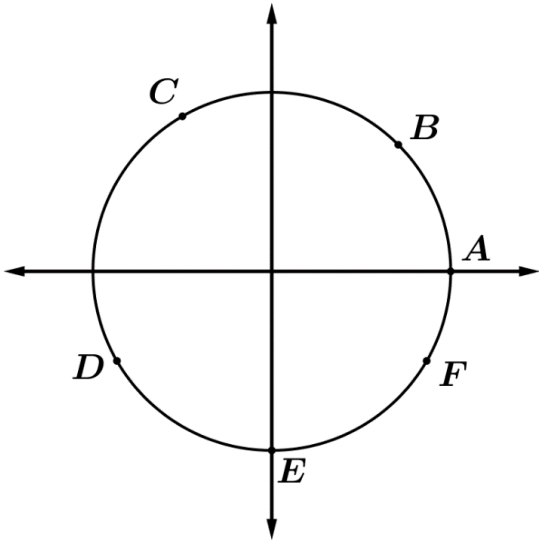
Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_

SCORE:

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## Using the Unit Circle

Refer to the diagram below. For the indicated point, tell if the value for each trigonometric function is **positive**, **negative**, **neither (zero)**, or **undefined**. Write the value of the trig function using  $x$  and/or  $y$ .



1.  $\sin A$

Pos, Neg, Zero, or Und?

Value: \_\_\_\_\_

2.  $\cos B$

Pos, Neg, Zero, or Und?

Value: \_\_\_\_\_

3.  $\sec F$

Pos, Neg, Zero, or Und?

Value: \_\_\_\_\_

4.  $\tan D$

Pos, Neg, Zero, or Und?

Value: \_\_\_\_\_

5.  $\cos E$

Pos, Neg, Zero, or Und?

Value: \_\_\_\_\_

6.  $\csc C$

Pos, Neg, Zero, or Und?

Value: \_\_\_\_\_

7.  $\sec A$

Pos, Neg, Zero, or Und?

Value: \_\_\_\_\_

8.  $\cot B$

Pos, Neg, Zero, or Und?

Value: \_\_\_\_\_

9.  $\tan E$

Pos, Neg, Zero, or Und?

Value: \_\_\_\_\_

10.  $\sin D$

Pos, Neg, Zero, or Und?

Value: \_\_\_\_\_

11.  $\csc E$

Pos, Neg, Zero, or Und?

Value: \_\_\_\_\_

12.  $\sec C$

Pos, Neg, Zero, or Und?

Value: \_\_\_\_\_

13.  $\tan A$

Pos, Neg, Zero, or Und?

Value: \_\_\_\_\_

14.  $\sec E$

Pos, Neg, Zero, or Und?

Value: \_\_\_\_\_

15.  $\cot C$

Pos, Neg, Zero, or Und?

Value: \_\_\_\_\_

State the angle in **degrees** represented by the given coordinate point.

16.  $\left(\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$

17.  $(-1, 0)$

18.  $\left(-\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$

19.  $\left(-\frac{1}{2}, -\frac{\sqrt{3}}{2}\right)$

20.  $(0, 1)$

21.  $\left(\frac{\sqrt{2}}{2}, -\frac{\sqrt{2}}{2}\right)$

State the angle in **radians** represented by the give coordinate point.

22.  $\left(\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$

23.  $(0, -1)$

24.  $\left(-\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$

25.  $\left(-\frac{\sqrt{2}}{2}, -\frac{\sqrt{2}}{2}\right)$

26.  $(1, 0)$

27.  $\left(\frac{1}{2}, -\frac{\sqrt{3}}{2}\right)$

Find the exact value of each trigonometric function using the Unit Circle as a reference.

28.  $\sin 45^\circ$

29.  $\cot \frac{\pi}{3}$

30.  $\sec 315^\circ$

31.  $\tan(-45^\circ)$

32.  $\csc \frac{2\pi}{3}$

33.  $\cos 90^\circ$

34.  $\sin(-30^\circ)$

35.  $\cot 2\pi$

36.  $\sec(-150^\circ)$

37.  $\tan \frac{4\pi}{3}$

38.  $\csc \frac{5\pi}{4}$

39.  $\cos 180^\circ$