

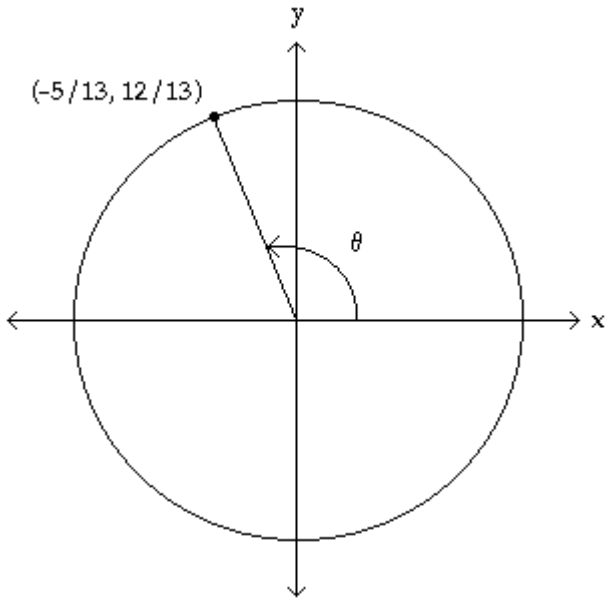
## The Unit Circle

**MULTIPLE CHOICE.** Choose the one alternative that best completes the statement or answers the question.

The figure shows angle  $\theta$  in standard position with its terminal side intersecting the unit circle. Evaluate  $\sin \theta$  and  $\cos \theta$ .

1)

1) \_\_\_\_\_



A)  $\sin \theta = -\frac{12}{5}$ ,  $\cos \theta = -\frac{5}{12}$

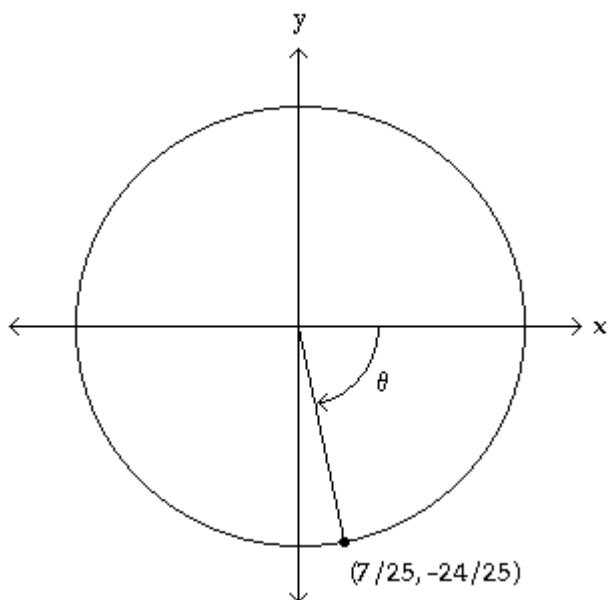
B)  $\sin \theta = \frac{12}{13}$ ,  $\cos \theta = -\frac{5}{13}$

C)  $\sin \theta = -\frac{5}{13}$ ,  $\cos \theta = \frac{12}{13}$

D)  $\sin \theta = \frac{13}{12}$ ,  $\cos \theta = -\frac{13}{5}$

2)

2) \_\_\_\_\_



A)  $\sin \theta = -\frac{24}{7}, \cos \theta = -\frac{7}{24}$

B)  $\sin \theta = -\frac{25}{24}, \cos \theta = \frac{25}{7}$

C)  $\sin \theta = \frac{7}{25}, \cos \theta = -\frac{24}{25}$

D)  $\sin \theta = -\frac{24}{25}, \cos \theta = \frac{7}{25}$

**Find the exact value. If the value of the function is not defined, write undefined.**

3)  $\sin(-180^\circ)$

A) Undefined

B) -1

C) 0

D) 1

3) \_\_\_\_\_

4)  $\csc 270^\circ$

A) 0

B) 2

C) Undefined

D) -1

4) \_\_\_\_\_

5)  $\sin 270^\circ$

A) 0

B)  $\frac{1}{2}$

C) Undefined

D) -1

5) \_\_\_\_\_

6)  $\cos(-90^\circ)$

A) -1

B)  $\frac{\sqrt{3}}{2}$

C) Undefined

D) 0

6) \_\_\_\_\_

7)  $\cot(-810^\circ)$

A) -1

B) 0

C) Undefined

D)  $\frac{\sqrt{2}}{2}$

7) \_\_\_\_\_

8)  $\sec 900^\circ$

A) 0

B) Undefined

C) -1

D) 1

8) \_\_\_\_\_

Answer Key

Testname: THE UNIT CIRCLE

- 1) B
- 2) D
- 3) C
- 4) D
- 5) D
- 6) D
- 7) B
- 8) C