

Radian and Degree Measure

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

Find a positive angle and a negative angle that are coterminal to the given angle.

1) 34° 1) _____
A) $214^\circ; -146^\circ$ B) $394^\circ; -326^\circ$ C) $394^\circ; -146^\circ$ D) $124^\circ; -56^\circ$

2) -45° 2) _____
A) $135^\circ; -135^\circ$ B) $315^\circ; -405^\circ$ C) $135^\circ; -225^\circ$ D) $315^\circ; -225^\circ$

3) $\frac{\pi}{3}$ 3) _____
A) $\frac{7\pi}{3}; -\frac{\pi}{3}$ B) $\frac{7\pi}{3}; -\frac{5\pi}{3}$
C) $\frac{\pi}{3} + 360^\circ; \frac{\pi}{3} - 360^\circ$ D) $\frac{4\pi}{3}; -\frac{2\pi}{3}$

Convert the angle from degree measure to radian measure. Round to the nearest hundredth of a radian when appropriate.

4) 36° 4) _____
A) $\frac{\pi}{5}$ B) $\frac{\pi}{4}$ C) $\frac{\pi}{7}$ D) $\frac{\pi}{6}$

5) -45° 5) _____
A) $-\frac{\pi}{4}$ B) $-\frac{\pi}{3}$ C) $-\frac{\pi}{5}$ D) $-\frac{\pi}{6}$

6) 630° 6) _____
A) $-\frac{7\pi}{4}$ B) $-\frac{7\pi}{2}$ C) 7π D) $\frac{7\pi}{2}$

Convert the angle from radian measure to degree measure. Round to the nearest hundredth of a degree when appropriate.

7) $\frac{7\pi}{4}$ 7) _____
A) 630° B) 102.86° C) 154.29° D) 315°

8) $-\frac{\pi}{5}$ 8) _____
A) -36° B) -0.63° C) -36° D) $-\frac{\pi}{5}^\circ$

9) $\frac{11\pi}{12}$ 9) _____
A) 330° B) 196.36° C) 165° D) 163.64°

Solve the problem.

10) Find the complementary angle to $\theta = 44.4^\circ$.

- A) 404.4° B) 134.4° C) 45.6° D) 135.6°

10) _____

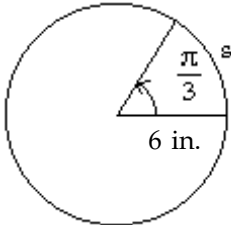
11) Find the supplementary angle to $\theta = 7^\circ$.

- A) 173° B) 187° C) 367° D) 83°

11) _____

12) Use the formula $s = r\theta$ to determine the value of s in the figure. Round to two decimal places.

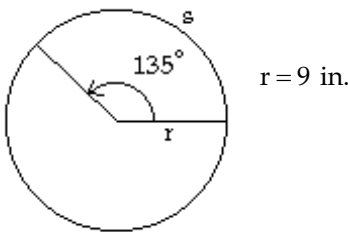
12) _____



- A) 0.17 in. B) 6.28 in. C) 12.57 in. D) 343.77 in.

13) Use the formula $s = r\theta$ to determine the value of s in the figure. Round to two decimal places, if necessary.

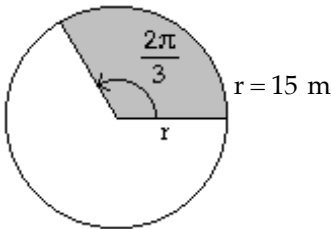
13) _____



- A) 3.82 in. B) 2.36 in. C) 1215 in. D) 21.21 in.

14) Find the area of the shaded sector. Round to one decimal place.

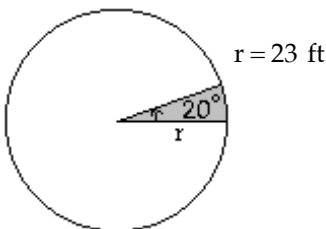
14) _____



- A) 235.6 m^2 B) 471.2 m^2 C) 32.9 m^2 D) 15.7 m^2

15) Find the area of the shaded sector. Round to one decimal place.

15) _____



- A) 92.3 ft^2 B) 184.7 ft^2 C) 4.0 ft^2 D) 0.7 ft^2

Answer Key

Testname: RADIAN AND DEGREE MEASURE

- 1) B
- 2) B
- 3) B
- 4) A
- 5) A
- 6) D
- 7) D
- 8) C
- 9) C
- 10) C
- 11) A
- 12) B
- 13) D
- 14) A
- 15) A