

Name \_\_\_\_\_

## CHAPTER 9 TEST PART 2-

- \_\_\_\_26. What is the radian measurement for  $80^\circ$ ?  
A.  $\frac{4\pi}{9}$                       B.  $\frac{\pi}{9}$                       C.  $\frac{2\pi}{9}$                       D. None of the above
- \_\_\_\_27. What is the degree measurement for  $\frac{\pi}{90}$ ?  
A.  $1^\circ$                       B.  $4^\circ$                       C.  $20^\circ$                       D. None of the above
- \_\_\_\_28. What is the radian measurement for  $140^\circ$ ?  
A.  $\frac{4\pi}{9}$                       B.  $\frac{4\pi}{3}$                       C.  $\frac{7\pi}{9}$                       D. None of the above
- \_\_\_\_29. What is the degree measurement for  $\frac{5\pi}{9}$ ?  
A.  $100^\circ$                       B.  $106^\circ$                       C.  $110^\circ$                       D. None of the above
- \_\_\_\_30. On a unit circle, what is the point location of  $30^\circ$ ?  
A.  $\left(\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$                       B.  $\left(\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$                       C.  $\left(\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$                       D. None of the above
- \_\_\_\_31. On a unit circle, what is the point location of  $-60^\circ$ ?  
A.  $\left(-\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$                       B.  $\left(\frac{\sqrt{3}}{2}, -\frac{1}{2}\right)$                       C.  $\left(\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$                       D. None of the above
- \_\_\_\_32. On a unit circle, what is the point location of  $120^\circ$ ?  
A.  $\left(-\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$                       B.  $\left(-\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$                       C.  $\left(-\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$                       D. None of the above
- \_\_\_\_33. On a unit circle, what is the point location of  $60^\circ$ ?  
A.  $\left(\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$                       B.  $\left(\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$                       C.  $\left(\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$                       D. None of the above
- \_\_\_\_34. On a unit circle, what is the point location of  $45^\circ$ ?  
A.  $\left(\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$                       B.  $\left(\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$                       C.  $\left(\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$                       D. None of the above
- \_\_\_\_35. On a unit circle, what is the point location of  $210^\circ$ ?  
A.  $\left(-\frac{1}{2}, -\frac{\sqrt{3}}{2}\right)$                       B.  $\left(-\frac{\sqrt{3}}{2}, -\frac{1}{2}\right)$                       C.  $\left(-\frac{\sqrt{2}}{2}, -\frac{\sqrt{2}}{2}\right)$                       D. None of the above

- \_\_\_\_36. On a unit circle, what is the point location of  $-120^\circ$ ?
- A.  $\left(-\frac{1}{2}, -\frac{\sqrt{3}}{2}\right)$     B.  $\left(-\frac{\sqrt{3}}{2}, -\frac{1}{2}\right)$     C.  $\left(-\frac{\sqrt{2}}{2}, -\frac{\sqrt{2}}{2}\right)$     D. None of the above
- \_\_\_\_37. On a unit circle, what is the point location of  $\frac{\pi}{4}$ ?
- A.  $\left(\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$     B.  $\left(\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$     C.  $\left(\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$     D. None of the above
- \_\_\_\_38. On a unit circle, what is the point location of  $\frac{5\pi}{6}$ ?
- A.  $\left(-\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$     B.  $\left(-\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$     C.  $\left(-\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$     D. None of the above
- \_\_\_\_39. On a unit circle, what is the point location of  $-\frac{4\pi}{3}$ ?
- A.  $\left(-\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$     B.  $\left(-\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$     C.  $\left(-\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$     D. None of the above
- \_\_\_\_40. On a unit circle, what is the point location of  $\frac{3\pi}{2}$ ?
- A. (1, 0)    B. (0, -1)    C. (0, 1)    D. (-1, 0)
- \_\_\_\_41. On a unit circle, what is the radian measurement of the angle that hits the point  $\left(\frac{\sqrt{3}}{2}, -\frac{1}{2}\right)$ ?
- A.  $\frac{\pi}{3}$     B.  $\frac{11\pi}{6}$     C.  $\frac{5\pi}{3}$     D. None of the above
- \_\_\_\_42. On a unit circle, what is the radian measurement of the angle that hits the point  $\left(-\frac{\sqrt{2}}{2}, -\frac{\sqrt{2}}{2}\right)$ ?
- A.  $\frac{7\pi}{4}$     B.  $\frac{7\pi}{6}$     C.  $\frac{4\pi}{3}$     D. None of the above
- \_\_\_\_43. On a unit circle, what is the radian measurement of the angle that hits the point (0, 1)?
- A.  $\frac{\pi}{2}$     B.  $\frac{3\pi}{2}$     C.  $\pi$     D. None of the above

- \_\_\_\_\_44. What angle is formed with the x-axis in the **first** quadrant if the angle opens **counterclockwise** and goes through the point (8, 1)?  
A.  $82.9^\circ$                       B.  $7.1^\circ$                       C.  $97.1^\circ$                       D.  $64.3^\circ$
- \_\_\_\_\_45. What angle is formed with the x-axis in the **first** quadrant if the angle opens **counterclockwise** and goes through the point (-11, 7)?  
A.  $112.5^\circ$                       B.  $122.5^\circ$                       C.  $147.5^\circ$                       D.  $158.5^\circ$
- \_\_\_\_\_46. What angle is formed with the x-axis in the **first** quadrant if the angle opens **counterclockwise** and goes through the point (6, -12)?  
A.  $296.6^\circ$                       B.  $333.4^\circ$                       C.  $243.4^\circ$                       D.  $367.8^\circ$
- \_\_\_\_\_47. Which two trig functions below are NOT reciprocals of one another?  
A. Sin and Csc                      B. Tan and Cot                      C. Cos and Csc
- \_\_\_\_\_48. If  $12^\circ$  were located at the ordered pair (.95, .32) – it is not, which other angle measurement below would have the same values, excluding the positive, negative values?  
A.  $78^\circ$                       B.  $-24^\circ$                       C.  $168^\circ$                       D.  $282^\circ$
- \_\_\_\_\_49. A plane is flying due East and is located at the point (1, 5). It now must turn North and head to the point ( 5, 20). How many degrees must it turn?  
A.  $14.9^\circ$                       B.  $24.7^\circ$                       C.  $68.3^\circ$                       D.  $75.0^\circ$
- \_\_\_\_\_50. A plane is flying due East and is located at the point (22, 70). It now turns  $77.3196^\circ$  left towards the North. It travels 41 miles. Where is it now located?  
A. (62, 79)                      B. . (31, 79)                      C. (62, 110)                      D. (31, 110)