

SM3 Unit9 Review

Name: \_\_\_\_\_

For questions 1-3, please select the radian measure  $\theta$ :

- 1) Convert  $50^\circ$  to radians.
  
  
  
  
  
  
  
  
  
  
- 2) Convert  $585^\circ$  to radians.
  
  
  
  
  
  
  
  
  
  
- 3) Convert  $-35^\circ$  to radians.
  
  
  
  
  
  
  
  
  
  
- 4) Convert  $\frac{7\pi}{9}$  to degrees.
  
  
  
  
  
  
  
  
  
  
- 5) Convert  $-\frac{\pi}{6}$  to degrees.
  
  
  
  
  
  
  
  
  
  
- 6) Convert  $\frac{7\pi}{15}$  to degrees.
  
  
  
  
  
  
  
  
  
  
- 7) Which quadrant does the terminal side of  $976^\circ$  lie in?
  
  
  
  
  
  
  
  
  
  
- 8) Which quadrant does the terminal side of  $-\frac{11\pi}{5}$ ?
  
  
  
  
  
  
  
  
  
  
- 9) Find a positive and negative coterminal angle for  $-87^\circ$ .

10) Find a positive and negative coterminal angle for  $\frac{22\pi}{3}$ .

11) What is the reference angle for  $19^\circ$ ?

12) What is the reference angle for  $-115^\circ$ ?

13) What is the reference angle for  $\frac{17\pi}{3}$ ?

14) What is the reference angle for  $-\frac{5\pi}{4}$ ?

15)  $\sec \theta =$

A  $\frac{\cos \theta}{\sin \theta}$

B  $\frac{\sin \theta}{\cos \theta}$

C  $\frac{1}{\sin \theta}$

D  $\frac{1}{\cos \theta}$

16)  $\tan \theta =$

A  $\frac{\cos \theta}{\sin \theta}$

B  $\frac{\sin \theta}{\cos \theta}$

C  $\frac{1}{\sin \theta}$

D  $\frac{1}{\cos \theta}$

17) Evaluate  $\sin(150^\circ)$

18) Evaluate  $\cos(30^\circ)$

19) Evaluate  $\cot(270^\circ)$

20) Evaluate  $\csc(405^\circ)$

21) Evaluate  $\sec\left(\frac{5\pi}{4}\right)$

22) Evaluate  $\cot\left(-\frac{\pi}{3}\right)$

23) In the triangle,  $BC = 4$ ,  $AB = 7$ . Find all six trig functions for  $\alpha$ .

