Test Review #3 Chapter 4A Name_____

No Calculator Page (Domain for #5 and #6 is $[0^\circ, 360^\circ)$)

1. $\sec 90^\circ =$

2. $sin\, 240^\circ$

3. $\cos \frac{3\pi}{4} =$

4. $\sin 300^\circ$

5. $sin\, 90^\circ = tan\, \theta$

6. $cos\, 135^\circ = sin\, \theta$

7. Change 120° into radians in terms of π.

8. Change $\frac{7\pi}{10}$ radians into degrees.

Suppose $\sin\theta = \frac{1}{3}$ and the terminal side of the angle lies in **quadrant II**. Find each value.
(Hint: First draw your triangle in quadrant II !!!!)

9. $\cos\theta =$

10. $\tan\theta =$

11. $\csc\theta =$

12. $\sec\theta =$

13. $\cot\theta =$

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14. Find $\cot 52^\circ 55' 54''$ =

15. Change 2.345 radians to degrees, minutes, and seconds.

16. Find one positive angle and one negative angle that are conterminal to a 200° angle.

17. Change $52^\circ 15' 34''$ to **radians.** (Round to five decimal places)

18. Solve the triangle. Round the sides and angles to the nearest tenth.

$B = 90^\circ$, a= 3 ft, b= 7ft. Find each. A =

C =

c =

19. What is the maximum value that $\cos\theta$ can be? Why?

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20. Where do the trigonometry functions come from?

21. At what angles is tangent undefined? Why?

22. Find two, one positive and one negative, angles coterminal to $\frac{\pi}{8}$.

23. Find the point on the circle given the central angle in standard positon and the radius.

a. $\theta = 30^{\circ}, r = 8$

b. $\theta = 300^{\circ}, r = 10$

c. $\theta = 405^{\circ}, r = 4$

d. $\theta = -120^{\circ}, r = 5$

e. $\theta = \frac{3\pi}{4}, r = 5$

f. $\theta = \frac{11\pi}{6}, r = 7$

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24. Find the reference angle for an angle of 192°.

25. Find the reference angle for an angle of 482°.

26. What is a radian?

27. Cos(2.345) =

28. What is the maximum value that $\sin\theta$? Why?

29. How do you know when to use the unit circle, 30-60-90 degree triangle or the 45-45-90 degree triangle when solving trigonometric functions?

30. Change $\frac{7\pi}{5}$ radians into degrees, minutes, and seconds.