

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

Degree Mode Practice \*\*\*Be sure to put your calculator in DEGREE mode\*\*\*

Find the measure of the acute angle,  $\theta$ , to 3 decimal places. (Answers should be written as " $\theta = \underline{\hspace{2cm}}$ ")

1.  $\theta = \sin^{-1}0.9353$
2.  $\theta = \tan^{-1}1.074$
3.  $\theta = \cos^{-1}0.9125$
4.  $\theta = \cot^{-1}0.5234$

Find the measure of  $\theta$  correct to 3 decimal places. (Answers should be written as " $\theta = \underline{\hspace{2cm}}$ ")

5.  $\sin\theta = 0.6468$  and  $90^\circ < \theta < 180^\circ$
6.  $\tan\theta = -0.1844$  and  $270^\circ < \theta < 360^\circ$
7.  $\cos\theta = -0.4142$  and  $180^\circ < \theta < 270^\circ$
8.  $\sec\theta = -2.84$

Radian Mode Practice \*\*\*Be sure to put your calculator in RADIAN mode\*\*\*

Find the decimal approximation for the inverse circular functions to 3 decimal places. (Answers should be written as " $x = \underline{\hspace{2cm}}$ ")

9.  $x = \sin^{-1} 0.6210$
10.  $x = \cos^{-1} 0.2092$

Find the measure of  $\theta$  to the nearest second. (Answers should be written as " $\theta = \underline{\hspace{2cm}}$ ")

11.  $\sin\theta = 0.3589$
12.  $\cos\theta = -0.8327$

Evaluate the expression. Leave the answer in simple radical form. Note that the expression  $\sin^2\theta$  means  $(\sin\theta)^2$ . NO CALCULATOR!

13.  $\sin 30^\circ + \cos 60^\circ$

14.  $2\sin 60^\circ \cos 240^\circ$

15.  $\cos 180^\circ \cos 45^\circ - \sin 180^\circ \sin 45^\circ$

16.  $\frac{\sin 120^\circ}{\cos 120^\circ}$

17.  $\sin^2 30^\circ + \cos^2 30^\circ + \tan^2 30^\circ - \sec^2 30^\circ$

18.  $4\sin \frac{\pi}{4} - 6\cos \frac{3\pi}{4}$

19.  $\frac{\cos \frac{\pi}{4}}{\sec \frac{\pi}{4}}$

20.  $\sin \frac{2\pi}{3} \cos \frac{\pi}{6} + \cos \frac{2\pi}{3} \sin \frac{\pi}{6}$

21.  $\sec^2 \pi - \tan^2 \pi$

