NAME _____ DATE _____

Practice Worksheet

Trigonometric Functions of Special Angles

Find each exact value. Do not use a calculator.

1. $\sin \frac{\pi}{4}$

2. $\cos \frac{\pi}{4}$

3. $\tan \frac{\pi}{4}$

4. $\cos 210°$

5. $\sin 300°$

6. $\tan 330°$

7. $\sin \frac{3\pi}{4}$

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

9. $\tan \frac{3\pi}{4}$

10. $\sin 90°$

11. $\csc 270°$

12. $\tan 45°$

13. $\cos \frac{3\pi}{2}$

14. $\tan \frac{3\pi}{2}$

15. $\sin \frac{3\pi}{2}$

Use a calculator to approximate each value to four decimal places.

16. $\cot (-75°)$

17. $\sin 634°$

18. $\cos 235°$

19. $\sin 2$

20. $\sec 4.28$

21. $\cot 0.23$

Practice Worksheet

Circular Functions

Find the values of the six trigonometric functions of an angle in standard position if the given point lies on its terminal side.

1. $(-1, 5)$ **2.** $(6, -8)$ **3.** $(3, 2)$ **4.** $(-3, -4)$

5. $(0, -4)$ **6.** $(7, 0)$ **7.** $(\sqrt{2}, -\sqrt{2})$ **8.** $\left(\frac{\sqrt{3}}{2}, -\frac{1}{2}\right)$

Suppose θ is an angle in standard position whose terminal side lies in the given quadrant. For each function, find the values of the remaining five trigonometric functions of θ.

9. $\cos \theta = \frac{3}{5}$; quadrant I   **10.** $\sin \theta = -\frac{2}{3}$; quadrant IV