**4-3** **Practice**

***Trigonometric Functions on the Unit Circle***

**#1-4 The given point lies on the terminal side of an angle *θ* in standard position.
 Find the values of the six trigonometric functions of *θ*.**

**1.** (–1, 5) **2.** (7, 0) **3.** (–3, –4) **4.** (2, –4)

**5.** Let$cosθ=\frac{2}{7}$ , where $sinθ<0$. Find the exact values of the six trigonometric functions of $θ$.

**Sketch each angle. Then find its reference angle.**

**7.** 330° **8.** – $\frac{3π}{4}$ **9.** $\frac{9π}{6}$

**10**. $\frac{7π}{4}$ **11.** 135° **12.** – $\frac{π}{3}$

**Find the exact value of each expression. If undefined, write *undefined*.**

**13.** csc 90° **14.** tan 270° **15.** sin (−90°)

**16.** cos $\frac{3π}{2}$ **17.** sec $\left(-\frac{π}{4}\right)$ **18.** cot $\frac{5π}{6}$

**19. PENDULUMS** The angle made by the swing of a pendulum and its vertical resting position can be modeled by
*θ* = 3 cos π*t*, where *t* is time measured in seconds and *θ* is measured in radians. What is the angle made by the pendulum after 6 seconds?

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