**5-5 Practice**

**Find the values of sin 2*θ*, cos 2*θ*, and tan 2*θ* for the given value and interval.**

**1.** sin *θ* = , (0°, 90°) **2.** tan *θ* =

**3.** cos *θ* = , **4.** tan *θ* = – ,

**Solve each equation on the interval [0, 2π).**

**5.**  cos2 *θ +*2 *θ* = 0 **6.** 2 – 3 cos *θ* = 0

**Find the exact value of each expression.**

**7.** tan 22.5° **8.** cos

**9.** Solve cos *θ* sin 2*θ* = 0 on the interval [0, 2π).

**10. BASEBALL** A batter hits a ball with an initial velocity of 100 feet per second at an angle *θ* to the horizontal.   
An outfielder catches the ball 200 feet from home plate. Find *θ* if the range of a projectile is given by the formula

*R* = sin 2*θ*.

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