**9-1 and 9-2 Practice**

**Use a calculator to find the solutions for each equation, rounded to the nearest tenth**

**1.** 4*x*2 − 36 = 0

**2.** *x*2 + 4*x* = 5

**3.** *x*2 + 2x − 6 = 0

**4.** 2*x*2 − 3*x* + 1 = 0

**5.** 4*x*2 + 20*x* + 25 = 0

**6.** Armando kicks a football into the air. The equation *f*(*x*) = −6*x*2 + 38*x* + 0.25
models the height of the football from the ground, in feet, with respect to the time *x,* in seconds. Use a calculator to estimate the time for the ball to return to the ground after being kicked.

**Solve each equation.**

**7.** (*x* − 5)(*x* + 7) = 0

**8.** (2*x* − 7)(5*x* + 3) = 0

**9.** *x*(*x* + 4)(5 − 2*x*) = 0

**Solve each equation by factoring.**

**10. *x***2 − 4*x* − 21 = 0 **11.** 10*x*2 − x − 2 = 0 **12.** 6*x*2 = *x* + 15

**Write the factored form for each quadratic function.**

13.

 14.

**15.** The area of the rubber coating for a flat roof is 96 ft2. The rectangular frame
the carpenter built for the flat roof has a length that is 4 feet greater than the
width. What are the dimensions of the frame?