**9.5 Factor *x*² + *bx* + *c* Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Worksheet 1 (With GCF)**

**Factor each problem completely.**

**1.**  **2.**  **3.** 

**4.**  **5.**  **6.** 

**7.** 2*x*² + 14*x* + 24 **8.** 2*x*² – 6*x* – 20 **9.** 3*x*² – 24*x* + 21

**10.** 5*x*² + 5*x* – 10 **11.** 7*x*² – 21*x* + 14 **12.** 9*x*² + 54*x* + 72

**13.** 8*x*² + 24*x* – 224 **14.** 10*a*² + 180*a* + 810 **15.** 4*c*² – 60*c* + 224

**Solve the following polynomial equations by factoring.**

**16.**  **17.** 

**18.**  **19.** 

**20.** *c*² – 3*c* = 4 **21.** 2*x*² + 6*x* = 56

**22.** 15*x*² + 15*x* = 30 **23.** 7*x*(*x* – 3) = –14

**24.** 9*x*² – 27*x* = –18 **25.** 8*x*² + 8*x* = 16