**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_**

**Factoring Trinomials-Worksheet 543**

**Factor each trinomial, if possible. If the trinomials cannot be factored using integers, write *prime*.**

**1.** 2$x^{2}$ + 5*x* + 2 **2.** 3$n^{2}$ + 5*n* + 2 **3.** 2$s^{2}$ + 9*s* – 5

**4.** 3$g^{2}$ + 7*g* + 2 **5.** 2$t^{2}$ – 11*t* + 15 **6.** 2$x^{2}$ + 3*x* – 6

**7.** 2$y^{2}$ + *y* – 1 **8.** 4$h^{2}$ + 8*h* – 5 **9.** 4$x^{2}$ – 3*x* – 3

**10.** 4$b^{2}$ + 15*b* – 4 **11.** 9$p^{2}$ + 6*p* – 8 **12.** 6$q^{2}$ – 13*q* + 6

**13.** 3$a^{2}$ + 30*a* + 63 **14.** 10$w^{2}$ – 19*w* – 15

**Solve each equation. Check your solutions.**

**15.** 2$x^{2 }$ + 7*x* + 3 = 0 **16.** 3$w^{2}$ + 14*w* + 8 = 0 **17.** 3$n^{2}$– 7*n* + 2 = 0

**18.** 5$d^{2}$ – 22*d* + 8 = 0 **19.** 6$h^{2}$ + 8*h* + 2 = 0 **20.** 8$p^{2}$ – 16*p* = 10

**21.** 9$y^{2}$ + 18*y* – 12 = 6*y*  **22.** 4$a^{2}$ – 16*a* = –15 **23.** 10$b^{2}$ – 15*b* = 8*b* – 12

**24.** 6$d^{2}$ + 21*d* = 10*d* + 35