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

**Factoring Using Distributive Property – Worksheet 529**

**Solve each equation. Check you solution.**

**1.** *x*(*x* + 3) = 0 **2.** 3*m*(*m* – 4) = 0 **3.**  (*r* – 3)(*r* + 2) = 0

**4.** 3*x*(2*x* – 1) = 0 **5.** (4*m* + 8)(*m* – 3) = 0 **6.** 5 = 25*s*

**7.**  (4*c* + 2)(2*c* – 7) = 0 **8.**  5*p* – 15 = 0 **9.** 4 = 28*y*

**10.** 12 = **–**2*x* **11.**  (4*a* + 3)(8*a* + 7) = 0 **12.** 8*y* = 12

**13.** = **–**2*x* **14.** (6*y* – 4)(*y* + 3) = 0 **15.** 4 = 4*m*

**16.** 12*x* = 3 **17.** 12 = **–**3*a* **18.** (12*a* + 4)(3*a* – 1) = 0

**Factor each polynomial.**

**19.** 24*x* + 48*y* **20.**  30*m* + – 6*n* **21.**  – 18 + 22*q*

**22.**  9 – 3*x* **23.**  4*m* + 6*n* – 8*mn* **24.**  45 – 15

**25.**  14 – 42 – 49 **26.**  55 – 11 + 44 **27.**  14 – 28 + *y*

**28.**  4*x* + 12 + 16 **29.**  4 + 28*a* + 7*ab* **30.**  6*y* + 12*x* – 8*z*

**31.**  + 2*x* + *x* + 2 **32.**  6 – 4*y* + 3*y* – 2 **33.**  4 + 4*mn* + 3*mn* + 3

**34.**  12*ax* + 3*xz* + 4*ay* + *yz* **35.**  12 + *3*a – 8*a* – 2 **36.**  *xa* + *ya* + *x* + *y*