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**Interpret the Discriminant**

**Worksheet 598**

**State the value of the discriminant for each equation. Then determine the number of solutions.**

**1.** 3*x*² + 2*x* – 3 = 0 **2.** 3*n*² – 7*n* – 8 = 0 **3.** 2*d*² – 10*d* – 9 = 0

**4.** 4*x*² = *x* + 4 **5.** 3*x*² – 13*x* = 10 **6.** 6*x*² – 10*x*+ 10 = 0

**7.** 2*k*² – 20 = –*k* **8.** 6*p*² = –11*p* – 40 **9.** 9 – 18*x* + 9*x*² = 0

**10.** 12*x*² + 9 = –6*x* **11.** 9*a*² = 81 **12.** 16*y*² + 16*y* + 4 = 0

**13.** 8*x*² + 9*x* = 2 **14.** 4*a*² – 4*a* + 4 = 3 **15.** 3*b*² – 18*b* = –14