**Solving Systems of Equations by GRAPHING**

**Graph each system and determine the number of solutions that it has. If it has one solution, name it.**

 **1.** *y* = *x* + 2 **2.** *x* + 3*y* = –3

 *x* – *y* = –2 *x* – 3*y* = –3



**3.** *y* – *x* = –1 **4.** *x* – *y* = 3

 *x* + *y* = 3 *x* – 2*y* = 3



 **5.** *x* + 2*y* = 4 **6.** *y* = 2*x* + 3

 *y* = $\frac{1}{2}$ *x* + 2 3*y* = 6*x* – 6



 **Solving Systems of Equations by ELIMINATION**

**7.** 2*p* – 3*r* = 6 **8.** 6*w* – 8*z* = 16 **9.** *c* + *d* = 6

 –2*p* + 3*r* = –6 3*w* – 4*z* = 8 *c* – *d* = 0

**10.** 2*u* + 4*x* = –6 **11.** 3*a* + *b* = –1 **12.** 2*x* + *y* = 6

 *u* + 2*x* = 3 –3*a* + *b* = 5 3*x* – 2*y* = 16

**13.** 3*y* – *z* = –6 **14.** *c* + 2*d* = –2 **15.** 3*r* – 2*t* = 1

 –3*y* – *z* = 6 –2*c* – 5*d* = 3 2*r* – 3*t* = 9

**16.** The sum of two numbers is 12. The difference of the same two numbers is –4. Find the numbers.

**17.** Twice a number minus a second number is –1. Twice the second number added to three times the first number is 9. Find the two numbers.