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

**Eliminating Using Addition**

**Worksheet 415**

**Use elimination to solve each system of equations.**

**1.** *x* + *y* = -4 **2.** 2*m* – 3*n* = 14 **3.** 3*a* – *b* = –9

*x* – *y* = 2 *m* + 3*n* = –11 –3*a* – 2*b* = 0

**4.** –3*x* – 4*y* = –1 **5.** 3*c* + *d* = 4 **6.** –2*x* + 2*y* = 9

3*x* – *y* = –4 2*c* – *d* = 6 2*x* – *y* = –6

**7.** 2*x* + 2*y* = –2 **8.** 4*x* – 2*y* = –1 **9.** *x* – *y* = 2

3*x* – 2*y* = 12 –4*x* + 4*y* = –2 *x* + *y* = –3

**10.** 2*x* – 3*y* = 12 **11.**  –0.2*x* + *y* = 0.5 **12.** 0.1*x* + 0.3*y* = 0.9

4*x* + 3*y* = 24 0.2*x* + 2*y* = 1.6 0.1*x* – 0.3*y* = 0.2

**13.** Rema is older than Ken. The difference of their ages in 12 and the sum of their ages is 50. Find the age of each.

**14.** The sum of the digits of a two-digit number is 12. The difference of the digits is 2. Find the number if the units digit is larger than the tens digit.

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

**Elimination Using Subtraction**

**Worksheet 416**

**1.** 6*x* + 5*y* = 4 **2.** 3*m* – 4*n* = –14 **3.** 3*a* + *b* = 1

6*x* – 7*y* = –20 3*m* + 2*n* = –2 *a* + *b* = 3

**4.** –3*x* – 4*y* = –23 **5.** *c* – 3*d* = 11 **6.** *x* – 2*y* = 6

–3*x* + *y* = 2 2*c* – 3*d* = 16 *x* + *y* = 3

**7.** 2*a* – 3*b* = –13 **8.** 4*x* + 2*y* = 6 **9.** 5*s* – *t* = 6

2*a* + 2*b* = 7 4*x* + 4*y* = 10 5*s* + 2*t* = 3

**10.** 6*x* – 3*y* = 12 **11.** *x* + 2*y* = 3.5 **12.** 0.2*x* + *y* = 0.7

4*x* – 3*y* = 24 *x* – 3*y* = –9 0.2*x* + 2*y* = 1.2

**13.** The sum of two numbers is 70. One number is ten more than twice the other number. Find the numbers.

**14. GEOMETRY** Two angles are supplementary. The measure of one angle is 10 more than three times the other. Find the measure of each angle.