 Name_____

Cramer's Rule

Date_____ Period____

Use Cramer's Rule to solve each system.

1) $-2x + 6y = 4$
$5x + y = 6$

2) $2r + 3s = -12$
$-6r - 2s = 7$

3) $-2x - 4y = -16$
$2x + 4y = 16$

4) $a + b = -4$
$-3a - 2b = 14$

5) $-x - 6y = -23$
$-2x + 5y = 5$

6) $-3x - y = -11$
$4x - 3y = 6$

7) $-3x + 5y = 7$
$2x + 2y = -6$

8) $a - b = -10$
$-2a - 2b = 2$

9) $-2a + 2b = -12$
$a - b = 11$

10) $-6a + 4b = 3$
$5a - 2b = -7$

11) $-a + b = -5$
$-5a - 2b + 6c = -5$
$-4a - b + 2c = 8$

12) $-4a - 2b - c = -11$
$-a - 2b = -6$
$a - b - 5c = 5$

13) $5x + 2y + 2z = 9$
$-6x - 4y - 3z = -19$
$x - 2y = -9$

14) $4a + 4c = 4$
$4a - 3b + c = -14$
$-2a - 3b - 5c = -20$

15) $-4x - 4y - 5z = -6$
$-4y + 5z = -6$
$x - 2y + 3z = -1$

16) $5x + 3y + 4z = -3$
$4x - 6y - 6z = 6$
$6x + z = -3$

Name_____

Cramer's Rule

Date_____ Period____

Use Cramer's Rule to solve each system.

1) $-2x + 6y = 4$
$5x + y = 6$

$(1, 1)$

2) $2r + 3s = -12$
$-6r - 2s = 7$

$\left(\frac{3}{14}, -\frac{29}{7}\right)$

3) $-2x - 4y = -16$
$2x + 4y = 16$

Infinitely many solutions

4) $a + b = -4$
$-3a - 2b = 14$

$(-6, 2)$

5) $-x - 6y = -23$
$-2x + 5y = 5$

$(5, 3)$

6) $-3x - y = -11$
$4x - 3y = 6$

$(3, 2)$

7) $-3x + 5y = 7$
$2x + 2y = -6$

$\left(-\frac{11}{4}, -\frac{1}{4}\right)$

8) $a - b = -10$
$-2a - 2b = 2$

$\left(-\frac{11}{2}, \frac{9}{2}\right)$

9) $-2a + 2b = -12$
$a - b = 11$

No solution.

10) $-6a + 4b = 3$
$5a - 2b = -7$

$\left(-\frac{11}{4}, -\frac{27}{8}\right)$

11) $-a + b = -5$
$-5a - 2b + 6c = -5$
$-4a - b + 2c = 8$

$(-3, -8, -6)$

12) $-4a - 2b - c = -11$
$-a - 2b = -6$
$a - b - 5c = 5$

$(2, 2, -1)$

13) $5x + 2y + 2z = 9$
$-6x - 4y - 3z = -19$
$x - 2y = -9$

$(-1, 4, 3)$

14) $4a + 4c = 4$
$4a - 3b + c = -14$
$-2a - 3b - 5c = -20$

Infinitely many solutions

15) $-4x - 4y - 5z = -6$
$-4y + 5z = -6$
$x - 2y + 3z = -1$

$\left(\frac{5}{2}, \frac{1}{4}, -1\right)$

16) $5x + 3y + 4z = -3$
$4x - 6y - 6z = 6$
$6x + z = -3$

$(3, 22, -21)$