Matrices

Name:_____ Date:_____

Cramer's Rules

1

$20x + y + 4z = 20$

$x + 2y + z = 40$

$2x + 10y + z = 20$

_____

2

$5x + 10y + 5z = 5$

$4x + 8y + 2z = 2$

$6x + 2y + 3z = 3$

_____

3

$17x + y + 2z = 34$

$2x + y + 2z = 4$

$x + 17y + z = 17$

_____

4

$18x + y + z = 18$

$9x + 7y + 2z = 126$

$9x + 7y + z = 63$

_____

5

$17x + 3y + 2z = 51$

$7x + 4y + 3z = 12$

$10x + 2y + z = 5$

_____

6

$3x + 2y + 6z = 1$

$4x + 2y + 8z = 4$

$4x + y + 2z = 8$

_____

7

$3x + 6y + 3z = 54$

$12x + 6y + 3z = 108$

$3x + 12y + 3z = 4$

_____

8

$11x + 4y + 2z = 22$

$2x + y + 2z = 4$

$x + 11y + z = 11$

_____

9

$5x + 2y + z = 10$

$4x + 2y + z = 14$

$9x + y + 2z = 18$

_____

10

$18x + y + 4z = 72$

$2x + 14y + 2z = 56$

$12x + y + 4z = 48$

_____

Matrices

Name:_____ Date:_____

Cramer's Rules

1

$20x + y + 4z = 20$

$x + 2y + z = 40$

$2x + 10y + z = 20$

$\left(\frac{-28}{3}, \frac{4}{3}, 52\right)$

2

$5x + 10y + 5z = 5$

$4x + 8y + 2z = 2$

$6x + 2y + 3z = 3$

$(0, 0, 1)$

3

$17x + y + 2z = 34$

$2x + y + 2z = 4$

$x + 17y + z = 17$

$\left(2, \frac{10}{11}, \frac{-5}{11}\right)$

4

$18x + y + z = 18$

$9x + 2y + 2z = 36$

$9x + 7y + z = 63$

$\left(0, \frac{15}{2}, \frac{21}{2}\right)$

5

$17x + 3y + 2z = 51$

$7x + 4y + 3z = 12$

$10x + 2y + z = 5$

$(5, -56, 67)$

6

$3x + 2y + 6z = 1$

$4x + 2y + 8z = 4$

$4x + y + 2z = 8$

$(3, -4, 0)$

7

$3x + 6y + 3z = 54$

$12x + 6y + 3z = 108$

$3x + 12y + 3z = 4$

$\left(6, \frac{-25}{3}, \frac{86}{3}\right)$

8

$11x + 4y + 2z = 22$

$2x + y + 2z = 4$

$x + 11y + z = 11$

$\left(\frac{12}{7}, \frac{6}{7}, \frac{-1}{7}\right)$

9

$5x + 2y + z = 10$

$4x + 2y + z = 14$

$9x + y + 2z = 18$

$(-4, 2, 26)$

10

$18x + y + 4z = 72$

$2x + 14y + 2z = 56$

$12x + y + 4z = 48$

$\left(4, \frac{32}{9}, \frac{-8}{9}\right)$