EffortlessMath

Math Worksheets

Name: _____

Date: _____

Systems of 3 Variable Equations

Solve each system of equations.

1) $x = 3y - 3z + 8$ $x =$ ____

$z = 4x + 5y - 14$ $y =$ ____

$3y + 2z = 14$ $z =$ ____

2) $6x - 6y = -12$ $x =$ ____

$2z = -6x - 6y + 18$ $y =$ ____

$-8x + 10y + 2z = 16$ $z =$ ____

3) $4x - 8z = 40$ $x =$ ____

$-6x + 2y - 8z = 40$ $y =$ ____

$-8x + 4y + 6z = -30$ $z =$ ____

4) $2x - 4y + 2z = -12$ $x =$ ____

$2x + 10z = -24$ $y =$ ____

$-2x + 12y + 8z = 6$ $z =$ ____

5) $x - y - 2z = -6$ $x =$ ____

$3x + 2y = -25$ $y =$ ____

$-4x + y - z = 12$ $z =$ ____

6) $6x - y + 3z = -9$ $x =$ ____

$5x + 5y - 5z = 20$ $y =$ ____

$3x - y + 4z = -5$ $z =$ ____

7) $-5x + 3y + 6z = 4$ $x =$ ____

$-3x + y + 5z = -5$ $y =$ ____

$-4x + 2y + z = 13$ $z =$ ____

8) $-6x + 5y + 2z = -11$ $x =$ ____

$-2x + y + 4z = -9$ $y =$ ____

$4x - 5y + 5z = -4$ $z =$ ____

9) $4x + 4y + z = 24$ $x =$ ____

$2x - 4y + z = 0$ $y =$ ____

$5x - 4y - 5z = 12$ $z =$ ____

10) $-10x + 10y + 6z = -46$ $x =$ ____

$-10x + 6y - 6z = -22$ $y =$ ____

$-12x + 12z = -24$ $z =$ ____

Answers

Systems of 3 variable equations

1) $(2, 2, 4)$
2) $(1, 3, -3)$
3) $(0, 0, -5)$
4) $(3, 3, -3)$
5) $(-5, -5, 3)$
6) $(-1, 6, 1)$
7) $(-2, 4, -3)$
8) $(4, 3, -1)$
9) $(4, 2, 0)$
10) $(1, -3, -1)$