Algebra 2   Name_____

Practice 3.6: Solve Systems of Three-Variable Equations Date_____ Period_____

Solve each system by elimination.

1) $-a + 3b - 6c = 20$
   $a + 4b - c = 15$
   $-7b - 5c = -23$

2) $-6a + 2b - 3c = 23$
   $5a + 4b + 3c = -12$
   $a + 2b + 3c = 6$

3) $-x - 6y - z = -11$
   $3x - 5y - 3z = 23$
   $3x + 5y + 4z = 1$

4) $2x - 3y - z = -17$
   $6x + 5y + z = -3$
   $2x + 2y + 2z = 8$

5) $6x - 5y - 3z = 6$
   $-x + 4y + 6z = -20$
   $-3x + y + z = 6$

6) $-2x + y - 4z = -20$
   $x - 4y + z = 4$
   $-4x - 5y - 4z = -16$

7) $-2x - y - 4z = 6$
   $-4x - 2z = -10$
   $5x + y + 6z = -1$

8) $3x + 3y - 3z = 21$
   $5x - 4y - 2z = 2$
   $4x + 2y - 3z = 21$

Answers to Practice 3.6: Solve Systems of Three-Variable Equations (ID: 1)

1) $(-2, 4, -1)$

2) $(-5, 1, 3)$

3) $(5, 2, -6)$

4) $(-3, 2, 5)$

5) $(-4, -6, 0)$

6) $(-2, 0, 6)$

7) $(5, 4, -5)$

8) $(4, 4, 1)$

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Answers to Practice 3.6: Solve Systems of Three-Variable Equations (ID: 1)

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