Name_____

Solving Systems of Three Equations w/ Elimination

Date_____ Period_____

Solve each system by elimination.

1) $-x - 5y - 5z = 2$
   $4x - 5y + 4z = 19$
   $x + 5y - z = -20$

2) $-4x - 5y - z = 18$
   $-2x - 5y - 2z = 12$
   $-2x + 5y + 2z = 4$

3) $-x - 5y + z = 17$
   $-5x - 5y + 5z = 5$
   $2x + 5y - 3z = -10$

4) $4x + 4y + z = 24$
   $2x - 4y + z = 0$
   $5x - 4y - 5z = 12$

5) $4x - y + 6z = 27$
   $-4x - 2y + 3z = 21$
   $4x - 6y + 2z = 12$

6) $-5a - b - 3c = -17$
   $-2a - b + 6c = 1$
   $-6a - b + 3c = -14$

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

8) $-4x - 2y + z = -19$
   $-6x + 2y - 6z = -8$
   $-4x + 2y - 5z = -6$

9) $6x - 6y - 4z = -10$
   $-5x + 4y - z = -12$
   $2x + 3y - 2z = 9$

10) $3r + 2s + 3t = 23$
    $-r - 4s + 4t = -21$
    $3r + s - t = 19$

11) $-x + 2z = -9$
    $-x - 3y - 4z = 2$
    $-3x - 2y + 2z = 17$

12) $2y + 2z = 6$
    $-6x + 5y + 2z = 12$
    $-4x - y - z = 1$

Critical thinking question:

13) Write a system of equations with the solution $(2, 1, 0)$.