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) $4r - 4s + 4t = -4$
$4r + s - 2t = 5$
$-3r - 3s - 4t = -16$

6) $x - 6y + 4z = -12$
$x + y - 4z = 12$
$2x + 2y + 5z = -15$

7) $x - y - 2z = -6$
$3x + 2y = -25$
$-4x + y - z = 12$

8) $5a + 5b + 5c = -20$
$4a + 3b + 3c = -6$
$-4a + 3b + 3c = 9$

9) $-6r + 5s + 2t = -11$
$-2r + s + 4t = -9$
$4r - 5s + 5t = -4$

10) $-6x - 2y + 2z = -8$
$3x - 2y - 4z = 8$
$6x - 2y - 6z = -18$

11) $5x - 4y + 2z = 21$
$-x - 5y + 6z = -24$
$-x - 4y + 5z = -21$

12) $6r - s + 3t = -9$
$5r + 5s - 5t = 20$
$3r - s + 4t = -5$

13) $-3a - b - 3c = -8$
$-5a + 3b + 6c = -4$
$-6a - 4b + c = -20$

14) $-5x + 3y + 6z = 4$
$-3x + y + 5z = -5$
$-4x + 2y + z = 13$

15) $3a - 3b + 4c = -23$
$a + 2b - 3c = 25$
$4a - b + c = 25$

16) $-6x - 2y - z = -17$
$5x + y - 6z = 19$
$-4x - 6y - 6z = -20$

Critical thinking question:

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