4SN Name_____

Substitution & Elimination

Date_____

Solve each system by substitution.

1) $y = -2$
$5x + 8y = -1$

2) $8x + 3y = -8$
$y = -7x - 20$

3) $y = -7x - 18$
$-2x + 4y = -12$

4) $y = -4x$
$7x - 3y = 19$

5) $-2x - y = -2$
$y = -4$

6) $y = -8$
$7x - 5y = 5$

7) $-5x - 2y = -21$
$y = -7$

8) $-8x - 6y = -20$
$y = -6x + 8$

9) $y = -3x - 9$
$5x + 8y = 23$

10) $2x - 4y = 0$
$y = 2$

Solve each system by elimination.

11) $8x - 9y = -26$
$-7x + 3y = -26$

12) $-2x - y = -4$
$x + 7y = 15$

13) $-18x + 6y = -6$
$-9x + 3y = -3$

14) $10x + 7y = 30$
$5x + 2y = 0$

15) $-10x + 4y = 8$
$-5x + y = 2$

16) $3x - 6y = 3$
$8x - 7y = -1$

17) $-7x + 8y = -2$
$-4x + 5y = 1$

18) $-9x - 10y = -1$
$10x - 3y = -13$

19) $-3x - 4y = -3$
$7x + 6y = 7$

20) $9x + 7y = -5$
$10x + 9y = 3$

Answers to Substitution & Elimination

1) $(3, -2)$
2) $(-4, 8)$
3) $(-2, -4)$
4) $(1, -4)$
5) $(3, -4)$
6) $(-5, -8)$
7) $(7, -7)$
8) $(1, 2)$
9) $(-5, 6)$
10) $(4, 2)$
11) $(8, 10)$
12) $(1, 2)$
13) Infinite number of solutions
14) $(-4, 10)$
15) $(0, 2)$
16) $(-1, -1)$
17) $(6, 5)$
18) $(-1, 1)$
19) $(1, 0)$
20) $(-6, 7)$