Kuta Software - Infinite Algebra 1 Name_____

Solving Systems of Equations by Substitution

Date_____ Period____

Solve each system by substitution.

1) $y = 6x - 11$
$-2x - 3y = -7$

2) $2x - 3y = -1$
$y = x - 1$

3) $y = -3x + 5$
$5x - 4y = -3$

4) $-3x - 3y = 3$
$y = -5x - 17$

5) $y = -2$
$4x - 3y = 18$

6) $y = 5x - 7$
$-3x - 2y = -12$

7) $\cancel{4x + y = 6} \rightarrow y = 4x + 6$
$-5x - y = 21$

8) $-7x - 2y = -13$
$\cancel{x - 2y = 11} \rightarrow x = 2y + 11$

9) $\cancel{-6x + 6y = 2} \rightarrow y = 5x - 2$
$-3x + 6y = -12$

10) $\cancel{-5x + y = -3} \rightarrow y = 5x - 3$
$3x - 8y = 24$

11) $x + 3y = 1 \rightarrow x = -3y + 1$
$-3x - 3y = -15$

12) $-3x - 8y = 20$
$-5x + y = 19 \rightarrow y = 5x + 19$

13) $-3x + 3y = 4$
$x + y = 3 \rightarrow y = x + 3$

14) $-3x + 3y = 3$
$-5x + y = 13 \rightarrow y = 5x + 13$

15) $6x + 6y = -6$
$5x + y = -13 \quad y = -5x - 13$

16) $x + y = 20 \rightarrow y = -x + 20$
$6x - 5y = 12$

17) $-3x - 4y = 2$
$3x + 3y = -3$

18) $-2x + 6y = 6$
$-7x + 8y = -5$

19) $-5x - 8y = 17$
$2x - 7y = -17$

20) $-2x - y = -9$
$5x - 2y = 18$