Math8

Name: _____

Solving Systems Using Elimination with Multiplication

1.) $\begin{cases} 3x + 5y = 10 \\ x - 5y = -10 \end{cases}$

2.) $\begin{cases} 3x + 6y = 6 \\ 2 \cdot (2x - 3y) = (4) \cdot 2 \end{cases}$ add

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3.) $\begin{cases} -2x + 3y = 25 \\ -2x + 6y = 58 \end{cases}$

4.) $\begin{cases} 3(2x + 6y) = (14) \cdot 3 \\ -2(3x + 9y) = (21) \cdot -2 \end{cases}$

$6x + {}^-18y = 42$
$-6x + 18y = -42$
_____
$0 = 0$ | IMS |

Infinitely Many
Solutions

5.) $\begin{cases} 2x + y = 9 \\ -4x + 7y = 27 \end{cases}$

6.) $\begin{cases} 2x + y = 3 \\ -2x + y = 1 \end{cases}$

Review . . . solve the following systems using substitution:

7.) $\begin{cases} y = 3x - 4 \\ 2x - 3y = -9 \end{cases}$

8.) $\begin{cases} 2x - 5y = 29 \\ x = 8 - 4y \end{cases}$