Geometry—Algebra Review HW #_____ Name_____
Solving Systems of 2 Equations
A5 ***Copy problems onto your own paper and show work.***

Solve by substitution. Give answers in (*x, y*) form.

1. $\begin{aligned} 2x - 5y &= 9 \\ y &= 3x - 7 \end{aligned}$
2. $\begin{aligned} -3x + 4y &= 1 \\ x &= 2y + 1 \end{aligned}$
3. $\begin{aligned} 6x + 2y &= 11 \\ 4x + y &= 6 \end{aligned}$
4. $\begin{aligned} x - 2y &= -1 \\ 5x - 7y &= 4 \end{aligned}$

Solve by linear combination (addition elimination). Give answers in (*x, y*) form.

5. $\begin{aligned} 5x + y &= 6 \\ -5x + 3y &= -22 \end{aligned}$
6. $\begin{aligned} 2x - 3y &= 4 \\ 8x + 3y &= 1 \end{aligned}$
7. $\begin{aligned} 2x - 7y &= -10 \\ 3x + 2y &= 10 \end{aligned}$
8. $\begin{aligned} -5x + y &= 17 \\ 3x + 2y &= 8 \end{aligned}$

9. $\begin{aligned} 5x - 2y &= -15 \\ 7x + 5y &= 18 \end{aligned}$
10. $\begin{aligned} 3x + 4y &= -6 \\ 7x + 5y &= -1 \end{aligned}$

Review: Solve and graph the solution on a number line.

11. $-11 \le 4x + 5 \le 13$
12. $\frac{-2}{3}x - 4 > 10$ *or* $5(x + 3) > 2x + 30$

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