Problems:

1. Solve this system of linear equations by graphing.

y = -1/5 x

y = -x – 4

2. Is (3, 1) a solution to the linear system?

2x + 9y = 15

19x + y = 1

3. Use the Method of Substitution to solve this linear system.

x – 7y = -11

5x — 2y = -18

4. Use the Method of Elimination to solve this linear system.

6x — 5y = 8

-12x + 2y = 0

5. Is (1, 9) a solution to this system of equations?

y = 8x + 1

y = x + 8

6. Solve this system of linear equations by graphing.

y = x — 2

y = 2x

7. Use the Method of Substitution to solve this linear system.

8x + 2y = 18

x + 2y = -10

8. Use the Method of Elimination to solve this linear system.

8x – 6y = 12

-8x + 5y = 2

9. Kendrick wrote a business plan for an entrepreneurship class, and now he has to make bound copies. Kendrick could use a printer who charges a setup fee of $50 and $5 for every copy printed. Another possibility is to go to the office supply store, where he could pay an up-front fee of $30 and $7 per copy. There is a certain number of copies that makes the two options equivalent in terms of cost. How much would the copies cost?

10. Two students in Mr. Montoya's class, Maggie and Jonah, have been assigned a workbook to complete at their own pace. They get together at Maggie's house after school to complete as many pages as they can. Maggie has already completed 94 pages and will continue working at an average pace of 1 page per hour. Jonah has only completed 88 pages, but can work at a rate of 4 pages per hour. Eventually, Jonah will catch up and the two will be working on the same page. How many pages will each of them have finished? How long will that take?

11. Georgetown City Cafe recently introduced a new flavor of coffee. They served 21 grande cups and 36 jumbo cups of the new coffee today, which equaled a total of 1,086 ounces. The day before, 21 grande cups and 31 jumbo cups were served, which used a total of 976 ounces. How much coffee is required to make each size?