Math 8CP
Chapter 5 Review

Complete this assignment in your spiral (warm-up section) showing all work ☺

Solve each system by graphing.

1) $y = 2x + 6$, $y = -x - 3$ → (-3, 0)

2) $3x + y = 3$, $2y = -6x + 8$ → $y = -3x + 3$, $y = -3x + 4$ → ∅

3) $3x + 2y = 12$, $3x + 2y = 6$ → $y = -\frac{3}{2}x + 6$, $y = -\frac{3}{2}x + 3$ → ∅

Solve each system using the substitution method.

4) $y = 3x + 2$, $6x - 2y = -4$ → IR

5) $2x + 7y = 3$, $x = 1 - 4y$ → (5, -1)

6) $x + 3y = 12$, $x - y = 8$ → (9, 1)

Solve each system using the elimination method.

7) $2x - 3y = -11$, $x + 3y = 8$ → (-1, 3)

8) $4x + y = -9$, $4x + 2y = -10$ → (-2, -1)

9) $6x + 2y = -10$, $2x + 2y = -10$ → (0, -5)

Use any method to solve.

10) $-4c + 2d = 6$, $-4c + d = 9$ → (-3, -3)

11) $x + y = -3$, $x = y + 1$ → (-1, -2)

12) $2y = -5x + 6$, $-9x - 2y = 22$ → (4, -7)

Write TWO equations with TWO variables each. Solve (don't forget sentence answers).

13) The sum of two numbers is 41. The difference of the numbers is 5. What are the numbers?

$x + y = 41$
$x - y = 5$

18 & 23

14) Four times a number minus three times another number is 12. Two times the first number added to three times the second number is 6. Find the numbers.

$4x - 3y = 12$ & $2x + 3y = 6$

3 & 0

**15) A sightseeing boat charges $5 for children and $8 for adults. The boat has 71 people and makes a total of $439. How many adults and children are on the boat?

$5c + 8a = 439$
$c + a = 71$

28 adults
43 children