Station 1

Solve by graphing [redacted]

1. $y = -2x + 3$

   $y = \frac{1}{2}x + 3$

2. $x + y = 3$

   $2x + y = 4$

3. $4x + 2y = 6$

   $2x + y = 3$

Station 2

Solve by substitution:

1. $Y = 2x$
   $x + y = 21$

2. $Y = x+3$
   $3x + 2y = 26$

3. $3x + 2y = 23$
   $x + 3y = 17$

Station 3

Solve by elimination:

1. $4x + 3y = 29$
   $2x - 3y = 1$

2. $3x + 7y = -2$
   $2x + 3y = -3$

3. $4x - 6y = 15$
   $6x - 4y = 10$

Station 4

Graph each inequality or system of inequalities on graph paper:

1. $X - 2y < 4$

2. $2x + 3y \geq 9$
   $X + y < 4$

3. $X < 2$
   $y \geq x$

Station 5

Write a system of equations then solve.

1. Sue and Carrie together weigh 105 kg. Carrie's weight is 15 kg less than twice Sue's weight. Find each girl's weight.
2. On one day, 4 chefs and 5 helpers earned $650. On another day working the same number of hours at the same rate of pay, 5 chefs and 6 helpers earned $800. How much does a chef earn each day?
3. An Algebra teacher is giving a test worth 150 points. The test will have 46 three and five point questions. How many of each question is on the test?

Station 6

Write a system of equations and solve.

1. The sum of two numbers is 105. The smaller number is 5 less than the larger number. Find the numbers.

2. The perimeter of a rectangle is 50 cm. The difference between the length and width is 9cm. Find the dimensions of the rectangle.

3. Rich Rhonda collects nickels and quarters. Her piggy bank now holds 30 coins amounting to $5.10. How many of each coin does she have?

4. How much of a 25% juice mixture would you have to combine with a 55% juice mixture to create 32 gallons of a 40% juice mixture?