1. Simplify $21\left(\frac{3}{7}y- \frac{5}{14}x\right)+3y$
2. Add $\frac{5}{12}+ \frac{11}{27}$.
3. Simplify $\frac{\left(6\right)\left(-4\right)-(3)(-5)}{-(9-12)}$
4. Simplify $\left(\frac{8xy^{-3}}{2x^{4}y}\right)^{-4}$
5. Solve 3x – 4y = -8, for y.
6. Solve and graph the following inequality;

$$\left|5x+3\right|-8\geq -2$$

1. Find the equation of the line that contains the point (0, -3), and is perpendicular to 3x – 4y = 14
2. Let f(x) = 3x + 4, g(x) = x- 2, and h(x) = 2x-3 find
3. h(g(3))
4. $\left(\frac{f-h}{g}\right)\left(x\right)$
5. Graph 4x – 8y $\geq $ 16
6. Find the slope and y intercept of

4x + 8y =14

1. Sarah left a $2.50 tip for a 18 dollar dinner. What percent of cost of dinner was the tip?
2. Find y if the line through
(-6,1) and (2,y) has a slope of 5/4.
3. Solve the following system.

x - 2y = 5

4x + 3z = 11

5y + 4z = -12

1. Solve the following system

-13x + 15y = 17

12x – 14y = 19

1. Graph the solution set for the system of linear inequalities.

2x + y $<$ 5

3x - 2y $\geq $ -4

1. Suppose Upward Bounds costs $4,000 per summer to use utilities, plus $13 per student for food. If they didn’t get grants, they would have to charge $150 per student.
2. Find the expression for the cost, revenue, and profit.
3. What is the break-even point?
4. Multiply $\left(4x- \frac{1}{3}\right)\left(3x+ \frac{1}{4}\right)$

Solve.

1. 90x2 + 60x = 80
2. $\frac{1}{2}x^{2}=-\frac{17}{6}x- \frac{5}{3}$
3. Given that f(x) = x2 - 6x + 3, find $\frac{f\left(x\right)-f(a)}{x-a}$.
4. Divide.

$$\frac{x^{2}-9}{3x-9} ÷ \frac{x^{3}+27}{x^{2}-6x +8}$$

1. Subtract.

$$\frac{9}{9x^{2}+6x-8}- \frac{6}{9x^{2}-4}$$

1. Simplify.

$$\frac{5- \frac{2}{x+3}}{3+ \frac{7}{x+3}}$$

1. Solve.

$$\frac{1}{x^{2}+5x+4}+ \frac{3}{x^{2}-1}= \frac{-1}{x^{2}+3x-4}$$