1. Solve the following system.

-2x + 4y + 4z = 7

-2x + 3y – z = 1

-4x + 2y – 4z = -4

1. Solve the following system

2x + 3y = 7

4x – 5y = 11

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

x – 2y $\geq $ 4

2x + 3y < 6

1. Suppose Upward Bounds costs $5,000 per summer to use utilities, plus $10 per student for food. If they didn’t get grants, they would have to charge $100 per student.
2. Find the expression for the cost, revenue, and profit.
3. What is the break-even point?
4. Multiply $\left(3x- \frac{1}{5}\right)\left(5x+ \frac{1}{3}\right)$

Solve.

1. 6x2 + 14x = 40
2. $\frac{1}{2}x^{2}=\frac{23}{6}x- \frac{7}{3}$
3. Given that f(x) = x2 + 2x – 8, find $\frac{f\left(x\right)-f(a)}{x-a}$.
4. Divide.

$$\frac{x^{2}-16}{3x+12} ÷ \frac{x^{3}-8}{x^{2}-7x +10}$$

1. Subtract.

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

1. Simplify.

$$\frac{1+ \frac{1}{x+3}}{4+ \frac{7}{x-3}}$$

1. Solve.

$$\frac{3}{2x+6}- \frac{x+1}{4x-12}= \frac{7}{x^{2}-9}$$