Week 1

Solving Linear Equations

MA123: Mathematical Reasoning & Modeling (Spring 2021)

Instructor: Emmanuel Thompson

Example 1:

Solve the equation

$$5x + 9 = 2x - 4$$

Example 2:

Solve the equation
$$-3x + 5 = 3x - 1$$

Example 3: Solve for x

$$2(3x+2) - 3(4-x) = x+8$$

Example 4:

Solve for x

$$8(x+9) + 4 = -5(x-8) - 11$$

Example 5: Solve for k

$$\frac{3}{4}k + \frac{-5}{9} = 6 - \frac{1}{9}k$$

Example 6: Solve for x

$$\frac{1}{3}x + \frac{1}{2} = -5\left(\frac{3}{4}x + 3\right)$$