

Section 3.1

System of equations

$$5x - 6y = 1$$

$$6x - 5y = 10$$

$$4x - 2y = 4$$

$$6x - 3y = 7$$

$$6x - 6y = 12$$

$$2x - 4y = 8$$

$$3x + 5y - z = 13$$

$$2x + 7y + z = 28$$

$$x + 7y + 2z = 32$$

$$x - 3y + 2z = 6$$

$$x + 4y - z = 4$$

$$5x + 6y + z = 20$$

$$2x + 3y + 7z = 15$$

$$x + 4y + z = 20$$

$$x + 2y + 3z = 10$$

$$y'' - 10y' + 21y = 0$$

$$y(x) = Ae^{3x} + Be^{7x}, y(0) = 15, y'(0) = 13$$