

ex. Solve

$$x - y - z = 2$$

$$y + 3z = 5$$

$$5z = 10$$

$$z = 2, y = 5 - 3z = -1,$$

$$x = 2 + (-1) + 2 = 3$$

$\Rightarrow$  back substitution.

ex. Solve

$$x - y - z = 2$$

$$3x - 3y + 2z = 16$$

$$2x - y + z = 9$$

$$1 \quad -1 \quad -1 \quad 2$$

$$3 \quad -3 \quad 2 \quad 16$$

$$2 \quad -1 \quad 1 \quad 9$$