(a)

Using Gaussian elimination with back substitution, solve the following two systems of equations:

(a)

$$3x_1 - 7x_2 - 2x_3 = -7,$$

$$-3x_1 + 5x_2 + x_3 = 5,$$

$$6x_1 - 4x_2 = 2$$
;

(b)

$$x_1 - 2x_2 + 3x_3 = 1,$$

$$-x_1 + 3x_2 - x_3 = -1,$$

$$2x_1 - 5x_2 + 5x_3 = 1.$$

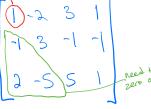
Next Item >

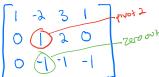
(b)

$$x_1 - 2x_2 + 3x_3 = 1,$$

$$-x_1 + 3x_2 - x_3 = -1,$$

$$2x_1 - 5x_2 + 5x_3 = 1.$$





$$X_1 - \lambda_{X_3} + \lambda_{X_3} = 1$$

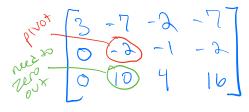
 $X_2 + \lambda_{X_3} = 0$
 $X_3 = -1$



$$3x_1 - 7x_2 - 2x_3 = -7,$$

$$-3x_1 + 5x_2 + x_3 = 5,$$

 $6x_1 - 4x_2 = 2;$



$$3x_{1} - 7x_{2} - 2x_{3} = -7$$

$$-2x_{2} - 1x_{3} = -2$$

$$-1x_{3} = 6$$

