Solve each of the following systems by elimination without matrices (5.2) and with matrices (6.1). See how the solutions are formatted to see what I mean.

1.
$$x + y + z = 6$$
$$2x - 2y - z = -5$$
$$3x + y - z = 2$$

2.
$$4x - 2y + z = 13$$
$$3x - y + 2z = 13$$
$$x + 3y - 3z = -10$$

3.
$$x + 3y + 7z = 11$$
$$2x + 7y + 17z = 24$$
$$-x - 4y - 10z = -13$$

4.
$$2x - 6y + 4z = 8$$
$$3x - 9y + 6z = 12$$
$$5x - 15y + 10z = 20$$

5.
$$x - 3y + 2z = 4$$
$$3x - 9y + 6z = 12$$
$$5x - 15y + 10z = 21$$

6. Find the coefficients $a, b,$ and c of a parabola (quadratic function) $f(x) = ax^2 + bx + c$, given that the following 3 points on its graph: $(1,5), (3,19),$ and $(-2,29)$.