Systems of equations – Inverse method: 3 variables

Solve the following equations.

$$\frac{6}{x} + \frac{5}{y} + \frac{8}{z} = -4$$
$$\frac{9}{x} + \frac{10}{y} - \frac{6}{z} = 23$$
$$\frac{12}{x} - \frac{5}{y} + \frac{4}{z} = -2$$

$$\frac{15}{x} + \frac{5}{y} - \frac{12}{z} = -21$$
$$\frac{10}{x} - \frac{15}{y} + \frac{4}{z} = -10$$
$$\frac{5}{x} + \frac{15}{y} + \frac{8}{z} = 16$$

$$\frac{4}{x} - \frac{6}{y} + \frac{9}{z} = 14$$
$$\frac{-8}{x} + \frac{10}{y} + \frac{9}{z} = -5$$
$$\frac{-4}{x} + \frac{10}{y} + \frac{15}{z} = -8$$

$$\frac{12}{x} - \frac{5}{y} + \frac{4}{z} = 12$$
$$\frac{6}{x} + \frac{12}{y} - \frac{3}{z} = 19$$
$$\frac{2}{x} + \frac{3}{y} - \frac{9}{z} = 11$$

$$\frac{-14}{x} + \frac{9}{y} + \frac{8}{z} = -7$$
$$\frac{8}{x} - \frac{9}{y} - \frac{4}{z} = 8$$
$$\frac{-6}{x} - \frac{12}{y} + \frac{8}{z} = 19$$

$$\frac{-8}{x} + \frac{12}{y} - \frac{5}{z} = -13$$
$$\frac{4}{x} - \frac{6}{y} + \frac{10}{z} = 11$$
$$\frac{12}{x} + \frac{9}{y} + \frac{5}{z} = -18$$

$$\frac{14}{x} + \frac{7}{y} + \frac{10}{z} = 25$$
$$\frac{7}{x} - \frac{7}{y} - \frac{6}{z} = -9$$
$$\frac{3}{x} - \frac{2}{y} + \frac{8}{z} = 22$$

$$\frac{9}{x} + \frac{12}{y} + \frac{4}{z} = 11$$
$$\frac{15}{x} - \frac{4}{y} - \frac{6}{z} = -8$$
$$\frac{3}{x} - \frac{8}{y} + \frac{4}{z} = 22$$