following is a method for solving a three variable system which we can always fall back on.

1. Determine an operating row (first change to standard form) use coefficient of $x$ that is closest to a one.

2. Use that operating row to eliminate the $x$'s in the other two. (now you have two equations in two variables) re-runs * one of these will be your new second row

3. Use the two equations in two variables to eliminate the $y$ value. * This will be your new 3rd row

4. Back substitution

$$ax+by+cz = d$$
$$ey+ fz = g$$
$$hx = i$$