restart

$$
\begin{gather*}
r 1:=3 \cdot x+y-z-7=0 ; r 2:=x+2 \cdot y-5 \cdot z-15=0 ; r 3:=3 \cdot x+5 \cdot y+2 \cdot z-9=0 ; \\
3 x+y-z-7=0 \\
x+2 y-5 z-15=0 \\
3 x+5 y+2 z-9=0 \tag{1}
\end{gather*}
$$

plots[implicitplot3d]([r1, r2, r3], $x=-6 . .6, y=-6 . .6, z=-6 . .6$, color $=[r e d$, blue, green ], style $=$ patchnogrid, scaling $=$ constrained $)$


$$
\begin{gather*}
r 1:=x+y+z-5=0 ; r 2:=3 \cdot x-2 \cdot y+z-3=0 ; r 3:=4 \cdot x-y+2 \cdot z-10=0 \\
x+y+z-5=0 \\
3 x-2 y+z-3=0 \\
4 x-y+2 z-10=0 \tag{2}
\end{gather*}
$$

plots[implicitplot3d]([r1, r2, r3], $x=-6 . .6, y=-6 . .6, z=-6 . .6$, color $=[r e d$, blue, green ], style $=$ patchnogrid, scaling $=$ constrained $)$
$r 1:=x+2 \cdot y+z-1=0 ; r 2:=3 \cdot x-z-6=0 ; r 3:=7 \cdot x-4 \cdot y-5 \cdot z-16=0 ;$

$$
x+2 y+z-1=0
$$

$$
3 x-z-6=0
$$

$$
\begin{equation*}
7 x-4 y-5 z-16=0 \tag{3}
\end{equation*}
$$

plots[implicitplot3d]([r1, r2, r3], $x=-6 . .6, y=-6 . .6, z=-6 . .6$, color $=[$ red, blue, green ], style $=$ patchnogrid, scaling $=$ constrained $)$


$$
\begin{gather*}
r 1:=x-2 \cdot y+z-1=0 ; r 2:=2 \cdot x-4 \cdot y+2 \cdot z-2=0 ; r 3:=-5 \cdot x+10 \cdot y-5 \cdot z+5=0 \\
x-2 y+z-1=0 \\
2 x-4 y+2 z-2=0 \\
-5 x+10 y-5 z+5=0 \tag{4}
\end{gather*}
$$

plots[implicitplot3d]([r1, r2, r3], $x=-6 . .6, y=-6 . .6, z=-6 . .6$, color $=[$ red, blue, green ], style $=$ patchnogrid, scaling $=$ constrained $)$
/

