

*with(plots):*

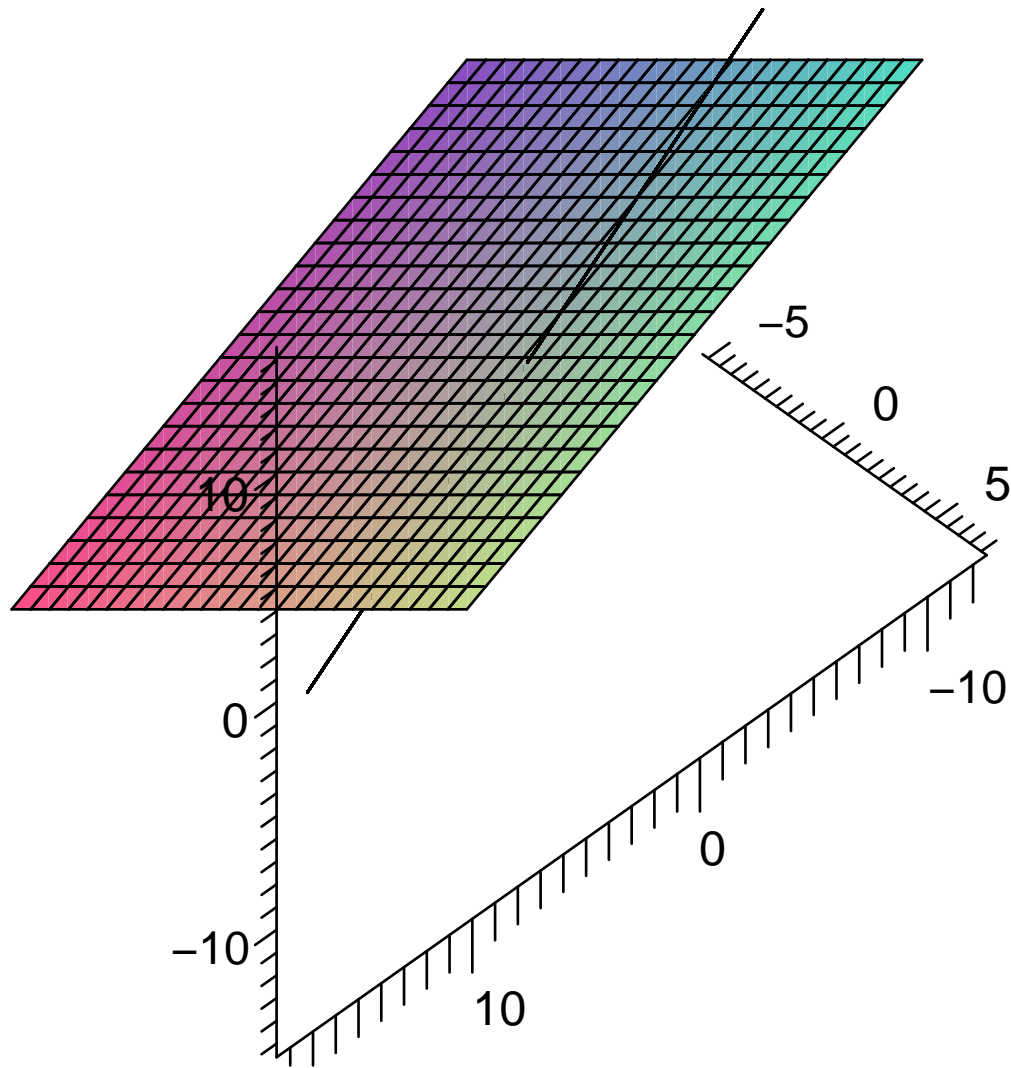
**intersection of plane and line**

*solve*({  $x + y + 2z = 3$ ,  $x = 2 - t$ ,  $y = 2 + t$ ,  $z = 3t$ }, [x, y, z, t]);

$$\left[ \left[ x = \frac{13}{6}, y = \frac{11}{6}, z = \frac{-1}{2}, t = \frac{-1}{6} \right] \right]$$

(1)

*plot3d*( { [3 - s - 2t, s, t], [2 - t, 2 + t, 3t] }, s = -5..5, t = -5..5, axes = framed, scaling = constrained);



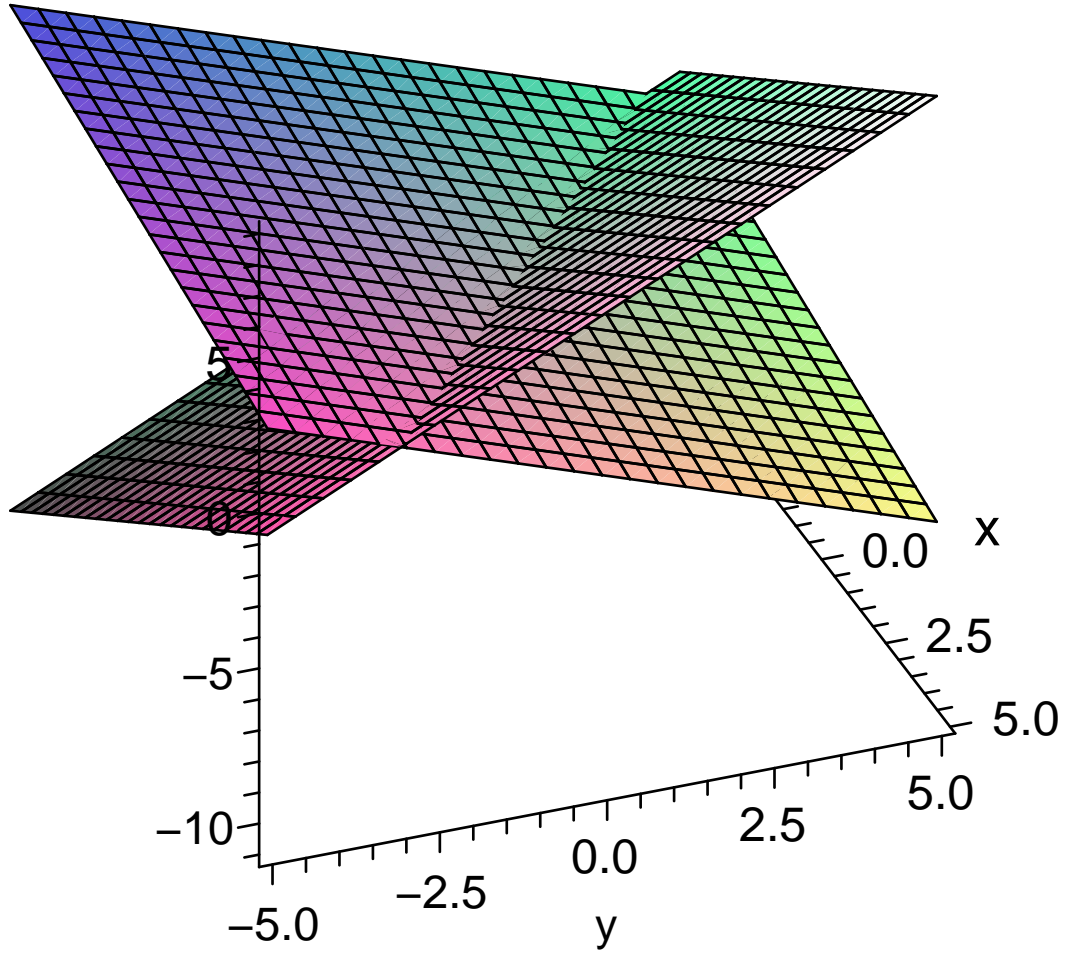
**intersection of plane and plane**

*solve*({  $2x + 5y + 7z = 2$ ,  $x + y - z = 1$ }, [x, y, z]);

$$[[x = 1 + 4z, y = -3z, z = z]]$$

(2)

*plot3d*( {  $\left( \frac{2 - 2x - 5y}{7}, x + y - 1 \right)$ , x = -5..5, y = -5..5, axes = framed );



(3)