

## SECTION 12.5 (Even solutions)

Answers to ODD problems are in the book.

10. Parametric Equations are  $x = 2+t$ ,  $y = 1-t$ ,  $z = t$

12. The direction vector of the line of intersection is  $\vec{v} = \vec{n}_1 \times \vec{n}_2 = \langle 5, 2, -3 \rangle$   
taking the point  $(1, 0, 0)$  we have

$$x = 1 + 5t, \quad y = 2t, \quad z = -3t.$$

28.  $x + y - z = -7.$

34.  $2x + y + 3z = 3.$

48. Point of intersection is  $(0, 7, 9)$

64. (a) The lines intersect at  $P_0 = (2, 0, 2)$

(b) Equation of plane is  $x + y = 2.$