1.

a)

Text, letter

Description automatically generated

b)

A picture containing text, whiteboard

Description automatically generated

The principal axis is R3 (0 0 1).

c)

Text, letter

Description automatically generated

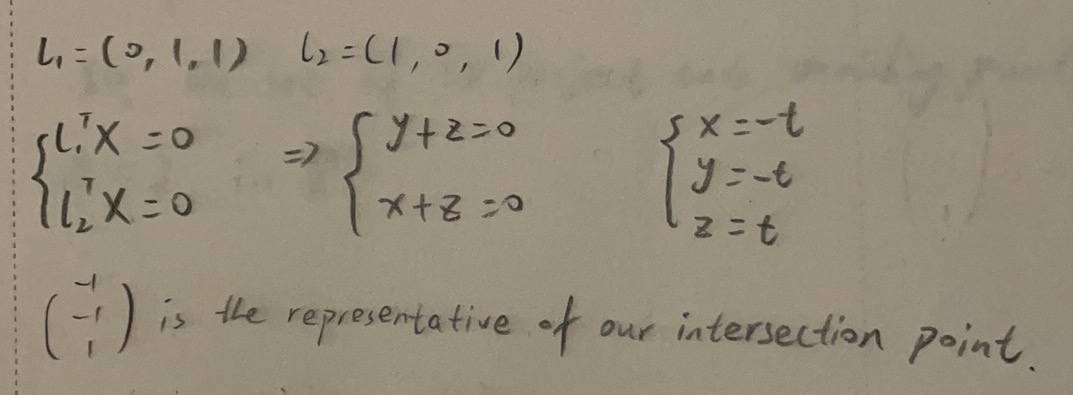
d)

Text, letter

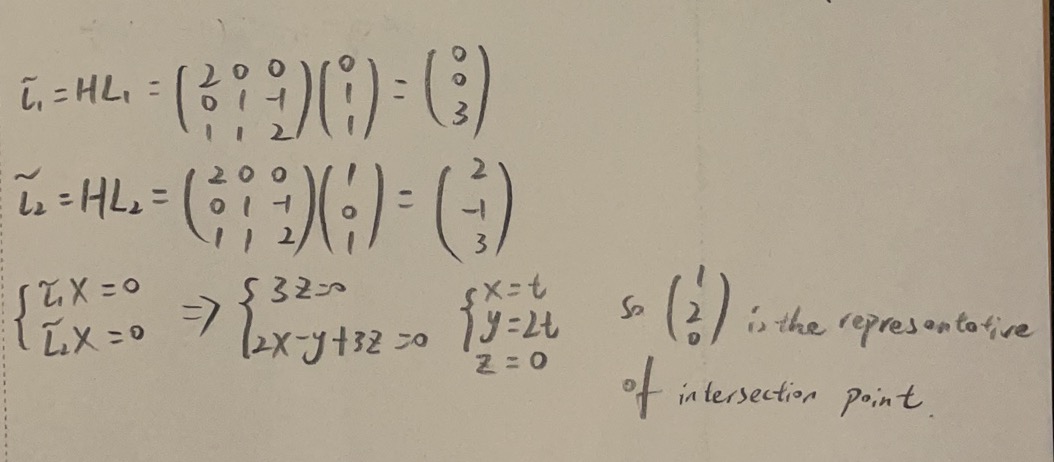
Description automatically generated

2.

a)



b)



c)

The new intersection point means that the new lines are parallel in R2 and the point is infinity far away in direction (1, 2).

3.

a)

A whiteboard with writing on it

Description automatically generated with medium confidence

b)

Text, letter

Description automatically generated

4.

a)

Text, letter

Description automatically generated

b)

Text, letter

Description automatically generated

c)

Graphical user interface

Description automatically generated

P = Table

Description automatically generated

best\_E =

Table

Description automatically generated

5.

a)

Text, letter

Description automatically generated

b)

Text, letter

Description automatically generated

c)

The projections of (x, y) and (x̄, ȳ) onto the line joining the epipolars e1 and e2 are collinear. The determinant det () = 0 means that the two corresponding points (x, y) and (x̄, ȳ) lie on a common epipolar line in the two views.

6.

I estimate the normal vector of a plane from corresponding points (I used x1a x2a and x1b x2b) using the given camera matrices P1 and P2.Text, letter

Description automatically generated

Application, table

Description automatically generated