Q1. ,

Write down the 34 P that relates

Q2. Given 2 lines: . Convert these lines to homogeneous representation and find the intersection in homogeneous coordinates. Convert this point back to Cartesian coordinates.



Q3. Write down the 22 rotation matrix which has the effect of an anti-clockwise rotation as illustrated, e.g. it maps (1,0) to (cos θ, sin θ).

(1,0)

θ

Q4. Write as a line equation in the homogeneous form (k is a constant). Thus, find the point at ∞ on . What can you say about this infinity point for lines with different k?