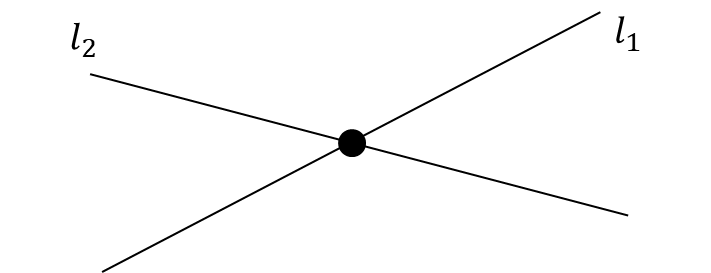
Points of Intersection

Example

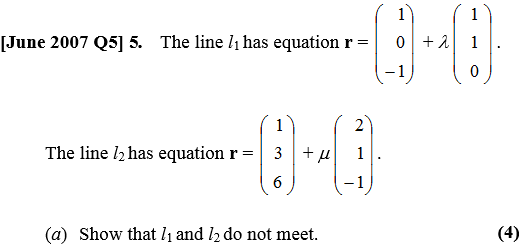
The lines and have vector equations and respectively. Show that the two lines intersect, and find the position vector of the point of intersection.



We can represent any point on as the position vector and any point line as . If the lines intersect, there must be a choice of and that makes those two points equal,

i.e.

Test Your Understanding



The Intersection of a Line and a Plane

Find the point of intersection of the line and the plane where:

The Intersection in Cartesian Form

The lines and have equations and respectively. Prove that and are skew.

Ex 9E Pg 191