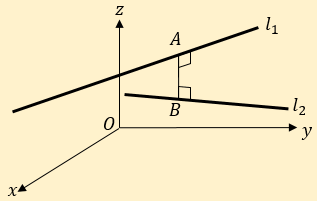
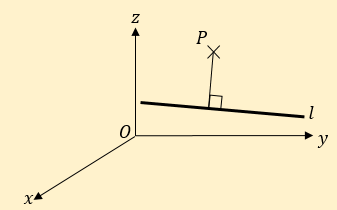
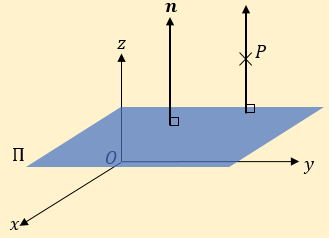
**9F Part 1 Perpendicular Distances with Lines**







1. Show that the shortest distance between the parallel lines with equations:

and

is

1. The lines and have equations:

Find the shortest distance between these two lines.

1. The line has equation:

The point has coordinates

1. Find the shortest distance between and .
2. Find a Cartesian equation of the line that is perpendicular to , and passes through .