



Parametrize the line  $L$  through  $B$  &  $D$ .

Then find points  $A$ ,  $C$ ,  $E$  on  $L$

such that  $B$  is between  $A$  &  $C$ ,

$C$  is between  $B$  &  $D$ ,

and  $D$  is between  $C$  &  $E$ .

② Parametrize the line through  $(0, 0, 1)$  that is perpendicular to  $\langle 1, 1, 1 \rangle$  &  $\langle 1, 1, 2 \rangle$ .

③ Find a unit vector parallel to the line satisfying  $x - 2y + 3z = 4$  &  $5x + 6z = 7$ .

④ Find Cartesian equations for the line  
in ①.

Hint for ①:

